

## Personal information

Surname(s) / First name(s)	<b>Khuhawar, Muhammad Yar</b>
Address(es)	A361, SUECHS, Phase-1, Jamshoro, Sindh, Pakistan - 76080
Telephone(s)	+92-22-2115628      Mobile: +92-3332751831
Email(s)	<a href="mailto:mykhuhawar@usindh.edu.pk">mykhuhawar@usindh.edu.pk</a>
Nationality(-ies)	Pakistani
Date of birth	February 5, 1948
Gender	Male

## Employment History

2011 – present	Professor Emeritus and Visiting Professor at <a href="#">University of Sindh</a>
1991 – 2011	Professor at <a href="#">University of Sindh</a>
1984 – 1991	Associate Professor at <a href="#">University of Sindh</a>
1978 – 1984	Assistant Professor at <a href="#">University of Sindh</a>
1973 – 1978	Lecturer at <a href="#">University of Sindh</a>
1972 – 1973	Research Fellow at <a href="#">University of Sindh</a>

## Education

2000	D.Sc. - <a href="#">University of Birmingham, UK</a>
1991	Senior Fulbright Fellow - <a href="#">University of Massachusetts Amherst, USA</a>
1982	Diploma - <a href="#">Shimadzu Corporation, Japan</a>
1977	Ph.D. in Chemistry - <a href="#">University of Birmingham, UK</a>
1971	M.Sc. in Organic Chemistry - <a href="#">University of Sindh, PK</a>
1970	B.Sc. in Chemistry - <a href="#">University of Sindh, PK</a>

## Honors and Awards

2012	Recipient of Productivity Allowance - <a href="#">Pakistan Council of Science and Technology</a>
2010 – 2011	Recipient of Productivity Allowance of 0.25 Million - <a href="#">Pakistan Council of Science and Technology</a>
2007 – 2008	Recipient of Productivity Allowance of 0.12 Million - <a href="#">Pakistan Council of Science and Technology</a>
2006 – 2007	Recipient of Productivity Allowance of 0.12 Million - <a href="#">Pakistan Council of Science and Technology</a>
2006	Best Teacher Award - <a href="#">University Grants Commission, Islamabad, Pakistan</a>
2005 – 2006	Recipient of Productivity Allowance of 0.21 Million - <a href="#">Pakistan Council of Science and Technology</a>
2004 – 2005	Recipient of Productivity Allowance of 0.21 Million - <a href="#">Pakistan Council of Science and Technology</a>
2004	Awardee of Salam Teacher's Day (Best Teacher Award) - <a href="#">Ministry of Education, Islamabad</a>
2003 – 2004	Recipient of Productivity Allowance of 0.21 Million - <a href="#">Pakistan Council of Science and Technology</a>
2003	Gold Medal and Cash Award of 0.2 Million - <a href="#">University of Sindh</a>
2002 – 2003	Recipient of Productivity Allowance of 0.21 Million - <a href="#">Pakistan Council of Science and Technology</a>
2001 – 2002	Recipient of Productivity Allowance of 0.6 Million - <a href="#">Pakistan Council of Science and Technology</a>
2001	Sitar-e-Imtiaz (S.I.) - <a href="#">President Islamic Republic of Pakistan</a>
2000	Best Teacher Award - <a href="#">University Grants Commission, Islamabad, Pakistan</a>
2000	Shield for Life Time Achievement Award - City Sight Forum, Shahdadkot, Pakistan
2000	Shield of Merit - <a href="#">Teachers of Teacher's Residence, University of Sindh</a>
2000	Shield of Merit - <a href="#">National Centre of Excellence in Analytical Chemistry, University of Sindh</a>
2000	Gold Medal for Meritorious Services - <a href="#">University of Sindh</a>
1999	Izaz-e-Kamal - <a href="#">President Islamic Republic of Pakistan</a>
1999	Elected as Fellow - <a href="#">Chemical Society of Pakistan</a>
1999	Shield of Merit - <a href="#">Intellectual Society of Sindh, Pakistan</a>

1998	Shield and Honor of being elected as Fellow Pakistan Institute of Chemists - Pakistan Institute of Chemists
1996	Gold Medal in Chemistry - <b>Pakistan Academy of Sciences</b>
1996	Shield by Chemical Society of Pakistan - <b>7th National Chemistry Conference, Quetta, Pakistan</b>
1996	Gold Medal (Science and Technology) - United Youth Council, Hyderabad, Pakistan
1996	Gold Medal for Meritorious Services - <b>University of Sindh</b>
1992	Latif Gold Medal (Science) - Latif Adabi Academy, Sindh, Pakistan
1987	Certificate of Commendation, First Prize and Rs. 25K (For achievements in Scientific Research in the field of Chemistry) - <b>National Book Foundation, Government of Pakistan</b>

## Administrative Experience

2013 – Present	Member Advisory Committee - <b>Education and Literacy Department, Government of Sindh, Karachi</b>
2009 – Present	Member of Selection Committee - <b>Sindh Agriculture University, Tandojam</b>
2009 – 2013	Member Technical - <b>WWF Sindh, Indus for All Programme</b>
2009 – 2013	Member, Syndicate - <b>Shah Abdul Latif University, Khairpur</b>
2009 – 2011	Director - <b>Institute of Advanced Research Studies in Chemical Sciences (IARSCS), University of Sindh</b>
2007 – 2009	Director - <b>High Technology Central Resource Laboratory (HTCRL), University of Sindh</b>
2007 – 2008	Member, Syndicate - <b>University of Sindh</b>
2005 – 2008	Dean - <b>Faculty of Natural Sciences, University of Sindh</b>
2004 – 2011	Project Director - <b>Establishment of High Technology Central Resource Laboratory (HTCRL), University of Sindh</b>
2004 – 2008	Member, Board of Governors - <b>National Centre of Excellence in Analytical Chemistry, University of Sindh</b>
2004 – 2007	Member - <b>Pakistan Atomic Energy Commission (Part-time)</b>
2003 – 2005	Project Director - <b>Establishment of High Technology Central Resource Laboratory (HTCRL), Higher Education Commission, Islamabad</b>
2002 – 2005	Director - <b>Dr. M.A.Kazi Institute of Chemistry, University of Sindh</b>
March, 2002 – August, 2002	Director - <b>Centre for Environmental Science, University of Sindh</b>
2000 – 2002	Project Director, Strengthening of Laboratories and Libraries of Science Departments - <b>University of Sindh and Ministry of Science and Technology, Pakistan</b>
1999 – 2005	Member, Provincial Coordination Cell - <b>Government of Sindh, Planning and Development, National Drainage Program, Sindh, Pakistan</b>
1996 – 2008	Member, Board of Advance Studies and Research - <b>University of Sindh</b>
1996 – 1999	Member, Board of Governors - <b>National Centre of Excellence in Analytical Chemistry, University of Sindh</b>
1996 – 2002	Incharge, Central Scientific Store - <b>University of Sindh</b>
1996 – 1999	Member, Environmental Management Committee - <b>WAPDA South, Hyderabad</b>
1996 – 1998	Member, Board of Studies on Chemical Sciences - <b>Quaid-i-Azam University, Islamabad</b>
1992 – 1999	Member, Technical on Chemistry - <b>Pakistan Science Foundation, Islamabad</b>

## Research Schemes Awarded

2011 – 2015	<b>HEC-BC INSPIRE Project, £32580</b> - Development of Bioinformatics Research, Teaching and Infrastructure at the University of Sindh
2013 – 2014	<b>SCDA/INFOFISH Project, \$18000</b> - Area Fishereis and Water Quality Survey, District Capacity Building and Hatchery Upgrades
2011 – 2013	<b>Principal Investigator, Pakistan Science Foundation, Rs. 0.8 Million</b> - Gas Chromatographic Analysis of Amino acids in Skin Samples of Psoriatic and Arsenicosis Patients
2012	<b>WWF Pakistan Project, Rs. 0.5 Million</b> - Water Quality Assessment of Manchar Lake
2010 – 2012	<b>Principal Investigator, Higher Education Commission, Islamabad, Rs. 1.15 Million</b> - Measurement of Guinadino Compounds in Uremic Subjects using New Precolumn Derivatizing Reagents by Capillary Electrophoresis
2008 – 2009	<b>Principal Investigator, Pakistan Science Foundation Project S-SU/Chem (411), Rs. 0.32742 Million</b> - Capillary Gas Chromatographic Determination of Glyoxal, Methylglyoxal and Dimethylglyoxal from Biological Fluids and Formated Food

2003 – 2005	<b>Principal Investigator, Pakistan Science Foundation Project, Rs. 0.95 Million</b> - Capillary Gas Chromatographic Determination on Biological Active Amines and Amino-Acids by Pre-Column Derivatization
2003 – 2005	<b>Principal Investigator, Higher Education Commission, Islamabad, Rs. 1.8 Million</b> - Development of New Mixed Stationary Phases for Gas Chromatography using Schiff Bases Metal Chelates
1999 – 2001	<b>Principal Investigator, UGC Scheme, Rs. 0.45 Million</b> - Preparation and Study of some Thermally Stable new Schiff Base Polymers and their Metal Chelates
1998 – 2000	<b>Principal Investigator, PSF Scheme S-SU/Chem (294), Rs. 0.4 Million</b> - Spectrophotometric and HPLC Determination of Cu, Ni, Fe, Co, V, Cd, Pb and Hg using New Semicarbazones as Derivatizing Reagents
1997	<b>WAPDA South, Hyderabad, consultancy agreement</b> - Analytical Chemist, Water Quality and Biological Survey in Chotiari and Tidal Link of Left Bank Out Fall Drain Project Stage 1
1991 – 1993	<b>Principal Investigator, PSF Scheme S-SU/Chem(200), Rs. 0.3 Million</b> - Effect of Municipal Sewerage and Industrial Effluents on the Fuleli Canal Water
1989 – 1991	<b>Principal Investigator, NSRD Project No:UN-JAM-PH-9(1), Rs. 0.5 Million</b> - Determination of Selenium(IV) by High Performance Liquid Chromatography as Piazoelenol
1989 – 1991	<b>Principal Investigator, UGC Scheme, Rs. 0.4 Million</b> - Applications of New Metal Complexes for Analysis of Copper, Nickel, Palladium, Vanadium and Uranium at Trace Levels
1989 – 1991	<b>Principal Investigator, PSF Scheme S-SU/Chem(172), Rs. 0.6 Million</b> - Applications of High Performance Liquid Chromatography for Multielemental Analysis using Ketoamine Schiff Bases
1984 – 1987	<b>Co-Principal Investigator PSF Scheme S-SU/Chem(133), Rs. 0.4 Million</b> - Preparation and Development of New Sensitive Chromogenic Reagents for Metal Analysis
1981 – 1984	<b>Co-Principal Investigator PSF Scheme S-SU/Chem(116), Rs. 0.45 Million</b> - Applications of Volatile Metal Complexes of Some New Schiff Bases

## Students Supervised

2018	<b>Zulfiqar Ali Bhatti</b> - Removal of arsenic from drinking water using indigenous iron ores and modified polyacrylonitrile as low cost reactive adsorbent media. ( <i>Ph.D. - MUET</i> )
2018	<b>Ghulam Nabi Rajper</b> - Investigation of possible effect on affymetrix 3 array due to adenine-adenine interactions. ( <i>M.Phil.</i> )
2018	<b>Rizwan Ali Zaunr</b> - Gas chromatographic determination of guanidino compounds using $\beta$ -diketones and ethyl chloroformate as derivatizing reagents in biological fluids and pharmaceutical preparations. ( <i>Ph.D.</i> )
2018	<b>Suresh Kumar Punjwani</b> - Drinking water quality and environmental monitoring in rural areas of district malir, karachi. ( <i>M.E. - MUET/University of Oulu</i> )
2018	<b>Abdul Majid Channa</b> - Development of analytical methods for the removal of endocrine disrupting compounds. ( <i>Ph.D.</i> )
2018	<b>Muhammad Yaqoob Soomro</b> - Synthesis and characterization of sulfanilamide derivatives metal complexes and their medical applications. ( <i>M.Phil.</i> )
2018	<b>Nazim Pervaiz</b> - Synthesis, characterization of aryl hydrazide derivatives and study of their complexing ability for determination of metal ions. ( <i>M.Phil.</i> )
2018	<b>Waheed Ali Soomro</b> - Indirect determination of dichlorofenic sodium in formulation by atomic absorption spectrophotometry after complexation with copper (II), iron (II), calcium (II) or magnesium (II). ( <i>M.Phil.</i> )
2017	<b>Imran Khan</b> - Water Quality Assessment of Groundwater of District Matiari, possible effects on human health. ( <i>M.Phil.</i> )
2017	<b>Sehar</b> - Determination of Lamotrigine by Pre-column Derivatization in Biological Fluids through High Performance Liquid Chromatography. ( <i>M.Phil.</i> )
2017	<b>Javeria Shaikh</b> - Determination of Sulfamethoxazole and Trimethoprin by HPLC in Pharmaceuticals and Biological Fluids. ( <i>M.Phil.</i> )
2017	<b>Zubaida Khatoon</b> - High Performance Liquid Chromatographic Determination of Primethamine and Sulfadoxine in Pharmaceutical Preparation and in Biological Fluids by Derivatization. ( <i>M.Phil.</i> )
2017	<b>Asma Leghari</b> - Gas Chromatographic Determination of Mesalazine by Pre-column Derivatization in Pharmaceutical Preparations and Blood Plasma. ( <i>M.Phil.</i> )
2017	<b>Nida Shams</b> - Gas Chromatographic Determination of NSAIDS Drugs after Derivatization. ( <i>M.Phil.</i> )
2017	<b>Shazia Rafique Solangi</b> - High Performance Liquid Chromatographic Determination of Minoxidil after Pre-column Derivatization. ( <i>M.Phil.</i> )

- 2017 **Abida Ali Sheikh** - Preparation and Characterisation of Schiff Bases and Polyesters. (*M.Phil.*)
- 2017 **Muhammad Farooque Lanjwani** - Water Quality Assessment of Groundwater of Populated Villages of District Qamber Shahdadkot. (*M.Phil.*)
- 2016 **Rao Muhammad Sajid** - Synthesis and Characterisation of some Dithiocarbamate functionalized Silver and Gold Nanoparticles as Colorimetric Probes for Selective Detection of Pesticides. (*M.Phil.*)
- 2015 **Muhammad Yahya Gilal** - Voltametric determination of pharmaceutical preparations containing Guanidino functional groupings. (*M.Phil.*)
- 2015 **Asghar Ali Majidano** - High Performance Liquid Chromatography Determination of Biological Active Compounds using Derivatizing Reagents. (*Ph.D.*)
- 2015 **Indra Devi Panjwani** - High Performance Liquid Chromatographic and Capillary Electrophoresis for the Determination of Biological Active Compounds by the Derivatization. (*Ph.D.*)
- 2015 **Mazhar Iqbal Khaskheli** - Evaluation of Economical Adsorbents for Arsenic and other Heavy Metals Remediation. (*Ph.D.*)
- 2015 **Muhammad Tariq Mahar** - Water Quality Assessment of Industrial Effluents of Ghotki and Rahim Yar Khan District and their effects on Soil and Ground Water. (*Ph.D.*)
- 2015 **Rafi-o-Zaman Brohi** - Gas Chromatographic Determination of Adenine, Guanine, Cytosine, Thymine and Uracil from DNA in Biofluids. (*M.Phil.*)
- 2014 **Abdul Jabar Kandhro** - Liquid Chromatographic and Capillary Electrophoresis Measurements of Guanidino Compounds in Uremic Subject using New Precolumn Derivatizing Reagents. (*Ph.D.*)
- 2014 **Zeenat M. Ali** - Investigation of Sensitive Flocculation Reagents for Improved Solid/Liquid Separation. (*Ph.D. - MUET*)
- 2014 **Ali Nawaz Siyal** - Synthesis and Characterization and Applications of Polymer based Novel Materials. (*Ph.D.*)
- 2013 **Moina Akhtar Mughal** - Synthesis and Characterization of Some New Schiff Base Polymers their Metal Chelates and Applications. (*Ph.D.*)
- 2013 **Subhan Ali Majidano** - Capillary Gas Chromatography Analysis of Amines, Amino acids and Biological active compounds from Skin, Blood and Urine of Healthy Volunteers and Persons Suffering from different Diseases. (*Ph.D.*)
- 2012 **Shaheen Shah** - Thermal Analysis and Gas Chromatography-mass Spectrometry of Isoniazid and Tranexamic Acid Drugs at Elevated Temperature. (*M.Phil.*)
- 2011 **Abdul Jabbar Leghari** - Development of New Mixed Stationary Phase for Gas Chromatography of Organic Compounds. (*Ph.D.*)
- 2011 **Ambreen Shah** - Synthesis and Characterization of Newer Schiff Base Polymers and Polythioamide. (*Ph.D.*)
- 2011 **Arfana Mallah** - Development of New Analytical Procedures for Simultaneous Determination of Various Metal Ions using Capillary Electrophoresis. (*Ph.D.*)
- 2011 **Khalida Parveen Mahar** - Development of New Kinetic Spectrophotometric methods for metalloids and liquid Chromatographic determination of Alpha-Keto Acids from Biological Samples. (*Ph.D.*)
- 2010 **Ghulam Hussain Burdi** - Systematic and Ecological Studies of Molluscs from Indus River and its Canals at Jamshoro. (*M.Phil.*)
- 2010 **Aamna Balouch** - Enhancement of the Analytical Performance of Spectral Methods for the Determination of Metal Cations, Anions and Neutral Organics via Utilization of Organized Surfactant Media. (*Ph.D.*)
- 2009 **Kulsoom Abassi** - Gas Chromatography of Some Pharmaceutical Preparations. (*Ph.D.*)
- 2009 **Liaquat Ali Zardari** - Capillary Gas Chromatographic Determination of Amines, Aminoacids, Hydrozino and Carbonyl Compounds by Pre-column Derivatization Methods. (*Ph.D.*)
- 2009 **Muhammad Aslam Mirza** - Assessment of Water Quality in Azad Jammu and Kashmir Area and Analytical Methods Development for Biological Active Compounds and Metal Ions. (*Ph.D.*)
- 2008 **Jamil-ur-Rahman Memon** - Solid Phase Extraction of Selected Heavy Metals. (*Ph.D.*)
- 2008 **Asghar Ali Majidano** - Physicochemical Assessment of Surface and Underground Water Resources of District Khairpur Mirs, Sindh, Pakistan. (*M.Phil.*)
- 2007 **Subhan Ali Majidano** - Physicochemical Assessment of Surface and Underground Water Resources of District Nawabshah, Sindh, Pakistan. (*M.Phil.*)
- 2007 **Ghulam Murtaza Arain** - Spectrophotometric and Liquid Chromatographic Determination of Metals and Metalloids by Derivatization. (*Ph.D.*)
- 2007 **Amber R. Solangi** - Development of New Analytical Methods for 4-Quinolone Antibacterial and Cephalosporin Antibiotics. (*Ph.D.*)

- 2007 **Farah Naz Talpur** - Fatty Acid Composition Ruminant Milk, Meat and Dairy Products of Livestock in Sindh, Pakistan. (*Ph.D.*)
- 2006 **Abdul Jabbar Kandhro** - Chromatographic Determination of Glyoxal and Methylglyoxal from Serum of Diabetic Patients using Meso-Stilbenediamine as Derivatizing Reagent. (*M.Phil.*)
- 2005 **Najma Memon** - Spectroscopic and Chromatographic Determination of Analytical Species using Organized Assemblies. (*Ph.D.*)
- 2005 **Saima Qayyum Memon** - Preparation of Metal Ions by Modified XAD Resin and Naturally Occurring Cheap Materials. (*Ph.D.*)
- 2005 **Zeenat M. Ali** - Gas Chromatographic Determination of Cholesterol from Multi-Component of Food and Biological Samples. (*M.E. - MUET*)
- 2004 **Indra Devi** - Indirect Spectrophotometric Determination of Vitamin E, K3, Cystein and Cystin. (*M.Phil.*)
- 2004 **Mukhtiar Ali Mahar** - Limnological Studies of Manchar Lake, District Dadu, Sindh. (*Ph.D.*)
- 2004 **Ahmed Din Rajper** - Spectrophotometric and HPLC Determination of Some Neurotransmitters and Hydrazino Compounds by Derivatization. (*Ph.D.*)
- 2004 **Taj Muhammad Jahangir** - Water Quality Assessment of underground and Surface Water of Sindh. (*Ph.D.*)
- 2003 **Mehboob Ali Rind** - Spectrophotometric and HPLC Determination of Isoniazid, Phenylpropanolamine and Tranexamic Acid using Derivatizing Methods. (*Ph.D.*)
- 2003 **Shah Muhammad Mahesar** - Comparative and Quantitative Biochemical Analysis of Blood and Amino Acids from Human epidermal keratin of Normal and Psoriatic Patients. (*Ph.D.*)
- 2003 **Moina Akhtar** - Synthesis of Some New Schiff Base Polymers. (*M.Phil.*)
- 2002 **Arfana Mallah** - HPLC Determination of Copper(II), Nickel(II), Palladium(II), Mercury(II), Silver(I) and Dioxouranium(VI) using Phenylsemicarbazone, Phenylthio-semicarbazone and Bis(acetylacetone)ethylenediimine as Derivatizing Reagent. (*M.Phil.*)
- 2002 **Ghulam Murtaza Mastoi** - Analysis of Water and Development of New Analytical Methods for the Determination of Metals and Non-Metal Ions. (*Ph.D.*)
- 2001 **Muhammad Amir Arain** - Liquid Chromatographic Determination of Anions, Metalloids and Metals by Derivatization. (*Ph.D.*)
- 2001 **Abdullah Leghari** - Budgeting and Effect of Biological Treatment on the Quality of Sewage Water at Hyderabad. (*M.E. - MUET*)
- 2000 **Vinod Kumar Dewani** - Pollution Study of Pre and Post Mixing of Hyderabad Sewage on Water and Sediments Quality of Fuleli Canal Compared to River Indus. (*Ph.D.*)
- 1999 **Mola Bux Rind** - Preparation Characterization and High performance Liquid Chromatographic Determination of Biological Active Diamines using 2-hydroxynaphthaldehyde as Derivatizing Reagent. (*M.Phil.*)
- 1999 **Ashfaq Ahmed Memon** - Capillary Gas Chromatographic Determination of Metal Ions, Biological Active Diamines and Development of New Mixed Stationary Phases for Gas Chromatography using Schiff Bases. (*Ph.D.*)
- 1999 **Rasool Bakhsh Maher** - Effects of Thermal Power Effluents on the Water Quality of River Indus. (*M.E. - MUET*)
- 1997 **Abdul Hameed Channar** - Some studies on organo- phosphorous pesticide malathion and new Schiff base polymers. (*Ph.D.*)
- 1996 **Pritam Das Jaipal** - Development of New Spectrophotometric and Preconcentration Methods for Determination of Metal Ions using new Complexing Reagents. (*M.Phil.*)
- 1995 **Shah Nawaz Lanjwani** - Applications of High Performance Liquid Chromatography for Simultaneous Determination of Metals using Tetradentate Schiff Bases and Phenylethiosemicarbazones as Complexing Reagents. (*Ph.D.*)
- 1990 **Abdul Karim Talpur** - Preparation Characterization and Chromatographic Studies of Tetradentate Schiff Bases and their Metal Complexes. (*Ph.D.*)
- 1990 **Altaf Hussain Soomro** - Application of High Performance Liquid Chromatography and Gas Chromatography for Multielemental Analysis at Trace Levels using Ketoamine Schiff Bases. (*Ph.D.*)
- 1990 **Ghulam Qadir Khaskhely** - Preparation and the Development of New Chromogenic Reagents and Tetradentate Ketoamine Schiff Bases for the analysis of Metal Ions. (*Ph.D.*)
- 1990 **Rasool Bakhsh Bozdar** - Gas and Liquid Chromatographic Studies for the Determination of Sulphide, Sulphite, Selenium, Copper, Nickel, Palladium and Vanadium. (*Ph.D.*)
- 1990 **Abdul Ghafoor Bhatti** - Preparation and Chromatographic Studies of Copper(II), Nickel(II), Palladium(II) and Vanadium(IV) Oxide Chelates of Quadridentate Schiff Bases. (*Ph.D.*)

1987 | **A.G.M. Vasandani** - Spectroscopic, Heat Stability and Gas Chromatographic Studies of Metal Complexes of New Tetradentate Schiff Bases. (*Ph.D.*)

**Additional information**

**Annexes**

1 | List of publications

# Attachment 1: List of publications

## Publications

- [1] M. Y. Khuhawar, R. O. Zaman Brohi, T. M. Jahangir, and M. F. Lanjwani, "Water quality assessment of ramser site, indus delta, sindh, pakistan," *Environmental Monitoring and Assessment*, vol. 190, p. 492, Jul 2018.
- [2] M. A. Mughal, M. Q. Samejo, A. Mughal, H. Khan, F. M. A. Rind, N. Liaquat, and M. Y. Khuhawar, "Synthesis, characterization and biological studies of schiff base polymeric resin," *Journal of the Chemical Society of Pakistan*, vol. 40, pp. 182–190, Feb. 2018.
- [3] F. Qureshi, M. Y. Khuhawar, and T. M. Jahangir, "Synthesis and characterization of new photo-responsive, ortho and para oriented azomethine polymers," *Acta Chimica Slovenica*, vol. 65, no. 0, pp. 718–729, 2018.
- [4] F. M. Khokhar, T. M. Jahangir, M. Y. Khuhawar, M. I. Khaskheli, and L. A. K. Khokhar, "Spectrophotometric and fluorometric studies of cobalt(ii), zinc(ii), nickel(ii), iron(ii) and copper(ii) of pyruvic acid 4-phenyl-3-thiosemicarbazone," *Sindh University Research Journal (Science Series)*, vol. 50, no. 2, pp. 321–326, 2018.
- [5] R. A. Zounr, M. Tuzen, B. Hazer, and M. Y. Khuhawar, "Solid-phase microextraction and determination of tin species in beverages and food samples by using poly ( $\epsilon$ -caprolactone-b-4-vinyl benzyl-g-dimethyl amino ethyl methacrylate) polymer in syringe system: a multivariate study," *Food Analytical Methods*, vol. 11, pp. 2538–2546, Sep 2018.
- [6] R. A. Zounr, M. Tuzen, and M. Y. Khuhawar, "Novel ultrasonic-assisted deep eutectic solvent-based dispersive liquid-liquid microextraction for determination of vanadium in food samples by electrothermal atomic absorption spectrometry: A multivariate study," *Applied Organometallic Chemistry*, vol. 32, no. 3, p. e4144, 2018.
- [7] M. A. Mirza, M. Khuhawar, R. Arain, and M. A. Ch, "Micellar electrokinetic chromatographic analysis of thorium, uranium, copper, nickel, cobalt and iron in ore and fish samples," *Arabian Journal of Chemistry*, vol. 11, no. 3, pp. 305 – 312, 2018.
- [8] Z. A. Bhatti, K. Qureshi, M. Y. Khuhawar, A. W. Bhutto, Z. A. Solangi, and I. N. Unar, "Low cost indigenous technologies for removal of arsenic from drinking water: Case study of pakistan," *International Journal of Research and Reviews in Applied Sciences*, vol. 34, pp. 66–77, Mar. 2018.
- [9] R. A. Zounr, M. Tuzen, and M. Y. Khuhawar, "Determination of selenium and arsenic ions in edible mushroom samples by novel chlorideoxalic acid deep eutectic solvent extraction using graphite furnace-atomic absorption spectrometry," *Journal of AOAC International*, vol. 101, pp. 593–600, Mar. 2018.
- [10] L. Zardari, M. Kamboh, H. Nodeh, A. Laghari, M. Y. Khuhawar, and S. Khokhar, "Capillary gas chromatographic determination of gamma aminobutyric acid and putrescine in cerebrospinal fluid using trifluoroacetylacetone as derivatizing reagent," *Pakistan Journal of Analytical & Environmental Chemistry*, vol. 19, no. 1, pp. 28–35, 2018.
- [11] R. A. Zounr, M. Tuzen, and M. Y. Khuhawar, "A simple and green deep eutectic solvent based air assisted liquid phase microextraction for separation, preconcentration and determination of lead in water and food samples by graphite furnace atomic absorption spectrometry," *Journal of Molecular Liquids*, vol. 259, pp. 220 – 226, 2018.
- [12] R. A. Zounr, M. Tuzen, N. Deligonul, and M. Y. Khuhawar, "A highly selective and sensitive ultrasonic assisted dispersive liquid phase microextraction based on deep eutectic solvent for determination of cadmium in food and water samples prior to electrothermal atomic absorption spectrometry," *Food Chemistry*, vol. 253, pp. 277 – 283, 2018.
- [13] R. A. Zounr, M. Tuzen, and M. Y. Khuhawar, "Ultrasound assisted deep eutectic solvent based on dispersive liquid liquid microextraction of arsenic speciation in water and environmental samples by electrothermal atomic absorption spectrometry," *Journal of Molecular Liquids*, vol. 242, pp. 441 – 446, 2017.
- [14] M. Alamgir, M. Y. Khuhawar, S. Q. Memon, A. Hayat, R. A. Zounr, and A. Chanar, "Hplc determination of metformin, famotidine and ranitidine by derivatization with benzoin from drugs and biological samples," *Pharmaceutica Analytica Acta*, vol. 8, pp. 1–7, May 2017.
- [15] C. J. Crous, T. I. Burgess, J. J. Le Roux, D. M. Richardson, B. Slippers, and M. J. Wingfield, "Ecological disequilibrium drives insect pest and pathogen accumulation in non-native trees," *AoB PLANTS*, vol. 9, no. 1, p. plw081, 2017.
- [16] Z. A. Bhatti, K. Qureshi, I. Bhatti, I. N. Unar, and M. Y. Khuhawar, "Determination of arsenic and health risk assessment in the ground water of sindh, pakistan," *Mehran University Research Journal of Engineering and Technology*, vol. 36, no. 4, pp. 1037–1048, 2017.
- [17] G. N. Mojai, F. N. Memon, Z. U. A. Khuhro, and M. Y. Khuhawar, "A-stack probes do not show significant effects on affymetrix genechip data," *Sindh University Research Journal (Science Series)*, vol. 49, no. 3, pp. 517–524, 2017.
- [18] A. Chanar, M. Y. Khuhawar, R. A. Zounr, and M. Alamgir, "Analysis of hydralazine in pharmaceutical preparations and biological fluids by gas chromatography," *Journal of the Chemical Society of Pakistan*, vol. 39, pp. 459–463, June 2017.
- [19] F. Qureshi, M. Y. Khuhawar, T. M. Jahangir, and A. H. Channar, "Synthesis, characterization and biological studies of new linear thermally stable schiff base polymers with flexible spacer," *Acta Chim Solve*, vol. 63, pp. 113–120, 2016.

- [20] R. Bughio, M. Y. Khuhawar, S. Bughio, and S. Q. Memon, "Spectrophotometric study of 2-hydroxyiminopropanoic acid with cu(ii), ni(ii), co(ii), fe(ii), zn(ii) and mn(ii) metal ions," *Sindh University Research Journal (Science Series)*, vol. 48, no. 4, pp. 941–944, 2016.
- [21] S. Q. Memon, A. M. Channa, and M. Y. Khuhawar, "Modeling of cadmium removal on lignite (thar coal) from aqueous system," *Pakistan Journal of Analytical and Environmental Chemistry*, vol. 17, no. 1, pp. 65–71, 2016.
- [22] S. Parveen, S. Q. Memon, A. N. Siyal, N. Memon, and M. Y. Khuhawar, "Large-volume sample stacking of rice polyphenols prior to their determination by non-aqueous capillary electrophoresis," *Food Analytical Methods*, vol. 9, no. 8, pp. 2152–2160, 2016.
- [23] R. A. Zounr, M. Y. Khuhawar, T. M. Jahangir, and M. Alamgir, "Improved gas chromatographic determination of guanidino compounds using isovaleroylacetone and ethyl chloroformate as derivatizing reagents," *Analytical Sciences*, vol. 32, pp. 141–146, 2016.
- [24] R. O. Z. Brohi, M. Y. Khuhawar, and T. M. Jahangir, "Gc-fid determination of nucleobases guanine, adenine, cytosine, and thymine from dna by precolumn derivatization with isobutyl chloroformate," *Journal of Analytical Science and Technology*, vol. 7, no. 1, p. 10, 2016.
- [25] R. O. Z. Brohi, M. Y. Khuhawar, A. Channa, A. J. Laghari, and K. Abbasi, "Gas chromatographic determination of purines and pyrimidines from dna using ethyl chloroformate as derivatizing reagent," *Pakistan Journal of Analytical and Environmental Chemistry*, vol. 17, no. 1, pp. 50–57, 2016.
- [26] W. Jamil, S. Solangi, M. Ali, K. M. Khan, M. Taha, and M. Y. Khuhawar, "Syntheses, characterization, in vitro antiglycation and {DPPH} radical scavenging activities of isatin salicylhydrazidehydrazone and its mn (ii), co (ii), ni (ii), cu (ii), and zn (ii) metal complexes," *Arabian Journal of Chemistry*, vol. 0, p. 0, 2015.
- [27] M. Alamgir, M. Y. Khuhawar, S. Q. Memon, A. Hayat, and R. A. Zounr, "Spectrofluorimetric analysis of famotidine in pharmaceutical preparations and biological fluids by derivatization with benzoin," *Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy*, vol. 134, pp. 449–452, 2015.
- [28] Z. A. Chandio, F. N. Talpur, M. I. Khaskheli, G. Q. Khaskheli, M. Y. Khuhawar, J. K. Malhi, and F. Kosar, "Solid phase extraction of cu (i) by bathocuproine modified on naphthalene prior to flame atomic absorption spectrometric determination," *Analytical Chemistry Letters*, vol. 5, no. 4, pp. 183–191, 2015.
- [29] M. A. Mirza, M. Y. Khuhawar, R. Arain, M. A. Choudhary, and K. P. Mahar, "Post-earthquake impact on quality of spring water in northern pakistan," *Asian Journal of Chemistry*, vol. 27, no. 5, pp. 1658–1662, 2015.
- [30] M. A. Mirza, M. A. Choudhary, M. Y. Khuhawar, R. Arain, A. Naz, and K. Yasmeen, "Physicochemical assay of water of kashmir lakes: A preliminary comparative study," *American Journal of Environmental Protection*, vol. 4, no. 3, pp. 152–162, 2015.
- [31] A. Hayat, T. M. Jahangir, M. Y. Khuhawar, M. Alamgir, Z. Hussain, F. U. Haq, and S. G. Musharraf, "Hplc determination of gamma amino butyric acid (gaba) and some biogenic amines (bas) in controlled, germinated, and fermented brown rice by pre-column derivatization," *Journal of Cereal Science*, vol. 64, pp. 56–62, 2015.
- [32] S. A. Majidano, M. Y. Khuhawar, A. H. Channar, T. M. Jahangir, M. Mughol, and A. M. Channa, "Gc analysis of guanidino compounds in serum and urine of healthy volunteers and uremic patients using methylglyoxal and ethyl chloroformate as derivatizing reagent," *Analytical Methods*, vol. 7, pp. 7724–7732, 2015.
- [33] S. Parveen, A. N. Siyal, N. Memon, S. Q. Memon, and M. Y. Khuhawar, "Extraction and determination of phenolic acids and vitamin b of sieved and unsieved wheat grain by mekc," *Journal of Liquid Chromatography and Related Technologies*, vol. 38, no. 1, pp. 143–152, 2015.
- [34] J. R. Memon, G. Z. Memon, M. I. Bhangar, M. Y. Khuhawar, P. J. Heard, K. R. Hallam, and G. C. Allen, "Effective removal of arsenite by musa paradisiaca," *Sindh University Research Journal (Science Series)*, vol. 47, no. 4, pp. 843–846, 2015.
- [35] M. T. Mahar, M. Y. Khuhawar, T. M. Jahangir, and M. A. Baloch, "Determination of arsenic contents in groundwater of district rahim yar khan southern punjab, pakistan," *Arabian Journal of Geosciences*, vol. 8, no. 12, pp. 10983–10994, 2015.
- [36] S. A. Majidano, M. Y. Khuhawar, R. A. Zounr, A. H. Channar, T. M. Jahangir, and M. Mughal, "Determination of amino acids in jams, fruits and pharmaceutical preparations by gas chromatography using trifluoroacetylacetone and ethylchloroformate as derivatizing reagents," *Analytical Methods*, vol. 7, pp. 3148–3156, January 2015.
- [37] T. M. Jahangir, M. Y. Khuhawar, S. M. Leghari, M. T. Mahar, and K. P. Mahar, "Water quality and sediment assessment of manchar lake, sindh, pakistan: After effects of the super flood of 2010," *Arabian Journal of Geosciences*, vol. 8, p. 3259–3283, May 2014.
- [38] A. Shah, M. Y. Khuhawar, and A. A. Shah, "Viscometric study of 4,4' naphthyl bis(oxy) bis benzaldehyde and its schiff base polymers in dmac solution at different temperatures," *Sindh University Research Journal (Science Series)*, vol. 46, no. 2, pp. 119–122, 2014.
- [39] A. N. Siyal, L. Elci, S. Q. Memon, A. Akdوغان, A. Hol, A. A. Kartal, and M. Y. Khuhawar, "Synthesis and characterisation of novel chelating resin for selective preconcentration and trace determination of pb(ii) ions in aqueous samples by innovative microsample injection system coupled flame atomic absorption spectrometry," *International Journal of Environmental Analytical Chemistry*, vol. 94, no. 8, pp. 743–755, 2014.



- [40] M. Alamgir, A. Hayat, A. A. Majidano, and M. Y. Khuhawar, "Spectrophotometric determination of metformin in pharmaceutical preparations, serum and urine using benzoin as derivatizing reagent," *Journal of the Chemical Society of Pakistan*, vol. 36, no. 2, pp. 344–349, 2014.
- [41] A. Hayat, T. M. Jahangir, M. Y. Khuhawar, M. Alamgir, A. J. Siddiqui, and S. G. Musharraf, "Simultaneous hplc determination of gamma amino butyric acid (gaba) and lysine in selected pakistani rice varieties by pre-column derivatization with 2-hydroxynaphthaldehyde," *Journal of Cereal Science*, vol. 60, no. 2, pp. 356–360, 2014.
- [42] A. Mallah, S. Q. Memon, A. R. Solangi, A. Khan, M. Y. Khuhawar, and M. I. Bhangar, "Separation and determination of chromium (iii) chromium (vi), gold (iii) and arsenic (v) by capillary zone electrophoresis using 2-acetylpyridine-4-phenylthiosemicarbazone as complexing reagent," *Journal of the Chemical Society of Pakistan*, vol. 36, pp. 255–262, April 2014.
- [43] S. Q. Memon, N. Memon, A. Mallah, R. Soomro, and M. Y. Khuhawar, "Schiff bases as chelating reagents for metal ions analysis," *Current Analytical Chemistry*, vol. 10, pp. 393–417, July 2014.
- [44] M. A. Mughal, A. H. Mughal, Z. M. Ali, G. Z. Memon, M. Y. Khuhawar, and H. Saleem, "Preparation, characterization, viscosity and thermal analysis of a schiff-based resin derived from 2-methoxy-1-naphthaldehyde," *IOSR Journal of Engineering (IOSRJEN)*, vol. 4, pp. 20–27, February 2014.
- [45] M. A. Mirza, M. Y. Khuhawar, R. Arain, and M. A. Ch, "Micellar electrokinetic chromatographic analysis of thorium, uranium, copper, nickel, cobalt and iron in ore and fish samples," *Arabian Journal of Chemistry*, vol. 0, no. 0, p. 26, 2014.
- [46] A. J. Kandhro and M. Y. Khuhawar, "Micellar electrokinetic capillary chromatography determination of guanidino compounds in serum of uremic patients by using pyridoin as derivatizing reagent," *Journal of the Chemical Society of Pakistan*, vol. 36, pp. 481–487, June 2014.
- [47] S. A. Soomro, M. Y. Khuhawar, and S. H. Soomro, "Gas chromatographic determination of amino acids and polyamines in human skin samples using trifluoroacetylacetone and isobutyl chloroformate as derivatizing reagents," *Journal of Chromatography and Separation Techniques*, vol. 5, no. 6, p. 10, 2014.
- [48] A. Shah, M. Y. Khuhawar, and A. A. Shah, "Evaluation of sorption behavior of polymeric resin [poly 4, 4'-(naphthyl bis(oxy))bisbenzaldehyde ethylenediamine] for cu (ii) and ni (ii) ions," *Journal of the Chemical Society of Pakistan*, vol. 36, pp. 277–281, April 2014.
- [49] F. M. Kanher, T. S. Syed, T. M. Jahangir, M. Y. Khuhawar, and G. H. Abro, "Evaluation of gamma irradiation on cotton genotypes fruiting parts and infestation of spotted bollworm, earias vittella (fab.)," *Sindh University Research Journal (Science Series)*, vol. 46, no. 2, pp. 231–238, 2014.
- [50] A. N. Siyal, S. Q. Memon, A. Elci, U. Divrikli, M. Y. Khuhawar, and L. Elci, "Development of 2-acetylpyridine-4-phenyl-3-thiosemicarbazone functionalized polymeric resin for the preconcentration of metal ions prior to their ultratrace determinations by mis-faas," *Turkish Journal of Chemistry*, vol. 38, no. 4, pp. 553–567, 2014.
- [51] M. T. Mahar, M. Y. Khuhawar, M. A. Baloch, T. M. Jahangir, and S. A. Majidano, "Determination of amino acids in industrial effluents contaminated soil," *Journal of the Chemical Society of Pakistan*, vol. 36, no. 5, pp. 965–975, 2014.
- [52] M. I. Khaskheli, S. Q. Memon, S. Parveen, and M. Y. Khuhawar, "Citrus paradisi: An effective bio-adsorbent for arsenic (v) remediation," *Pakistan Journal of Analytical and Environmental Chemistry*, vol. 15, no. 1, pp. 35–41, 2014.
- [53] M. A. Mughal, A. H. Mughal, G. Z. Memon, M. Y. Khuhawar, and S. Qureshi, "Adsorption studies of copper (ii) and nickel (ii) ions on polymeric resin pmbmnen," *IOSR Journal of Engineering (IOSRJEN)*, vol. 4, pp. 34–42, April 2014.
- [54] T. M. Jahangir, M. Y. Khuhawar, S. M. Leghari, M. A. Mahar, and M. S. Baluch, "Water quality assessment of haleji lake (sindh, pakistan) a ramsar recognized site," *Journal of the Chemical Society of Pakistan*, vol. 35, no. 3, pp. 1004–1016, 2013.
- [55] M. A. Mughal, A. Mughal, G. Z. Memon, M. Y. Khuhawar, and S. Qureshi, "Synthesis, characterization, viscosity and thermo analytical studies of schiff base polymers derived from 6,6-methylene bis(1-naphthaldehyde)," *Asian Journal of Chemistry*, vol. 25, pp. 9931–9935, December 2013.
- [56] M. A. Mughal, A. H. Mughal, Z. M. Ali, G. Z. Memon, M. Y. Khuhawar, and H. Saleem, "Synthesis, characterization and antibacterial and antifungal studies of schiff base polymers derived from methylene bis cinnamaldehyde," *IOSR Journal of Engineering (IOSRJEN)*, vol. 3, pp. 48–55, October 2013.
- [57] Z. M. Ali, A. J. Laghari, A. K. Ansari, and M. Y. Khuhawar, "Synthesis and characterization of carboxymethyl chitosan and its effect on turbidity removal of river water," *IOSR Journal of Applied Chemistry (IOSR-JAC)*, vol. 5, no. 3, pp. 72–79, 2013.
- [58] M. A. Mughal, A. Mughal, G. Z. Memon, and M. Y. Khuhawar, "Synthesis and characterization of antimicrobial metal based polymeric ligand derived from 4,4'-methylene-bis(furfuraldehyde)," *Asian Journal of Chemistry*, vol. 25, no. 11, pp. 6327–6333, 2013.
- [59] K. F. Almani, M. G. H. Laghari, A. H. Memon, F. M. A. Rind, U. R. Mughal, M. L. Maheshwari, and M. Y. Khuhawar, "Spectrophotometric determination of isoniazid from pharmaceutical preparations using natural aldehyde," *Asian Journal of Chemistry*, vol. 25, no. 5, pp. 2522–2526, 2013.

- [60] M. Alamgir, M. Y. Khuhawar, A. Hayat, and A. A. Majidano, "Spectrophotometric determination of famotidine using benzoin as derivatizing agent," *International Journal of Advanced Research (IJAR)*, vol. 1, no. 8, pp. 549–555, 2013.
- [61] A. Mallah, A. R. Solangi, N. Memon, R. A. Memon, and M. Y. Khuhawar, "Reversed-phase liquid chromatographic separation and determination of ni(ii), cu(ii), pd(ii), and ag(i) using 2-pyrrolicarboxaldehyde-4-phenylsemicarbazone as a complexing reagent," *Journal of Chemistry*, vol. 2013, p. 5, 2013.
- [62] A. N. Siyal, S. Q. Memon, and M. Y. Khuhawar, "Recycling of styrofoam waste: Synthesis, characterization and application of novel phenyl thiosemicarbazone surface," *Polish Journal of Chemical Technology*, vol. 14, no. 4, pp. 11–18, 2013.
- [63] A. H. Channar, A. A. Sheikh, M. Y. Khuhawar, S. A. Majidano, and T. Pirzada, "Preparation and characterization of new polyesters derived from schiff bases," *Journal of the Chemical Society of Pakistan*, vol. 35, pp. 151–156, February 2013.
- [64] A. Shah, M. Y. Khuhawar, H. Khan, and A. A. Shah, "One pot synthesis and characterization of derived polythioamide with 1, 2-phenylenediamine," *Sindh University Research Journal (Science Series)*, vol. 45, no. 1, pp. 153–158, 2013.
- [65] M. A. Mughal, A. Mughal, Z. M. Ali, G. Z. Memon, M. Y. Khuhawar, and H. Saleem, "New antimicrobial schiff base polymers derived from 6, 6-methylenebis (1-naphthaldehyde)," *International Journal of Scientific and Engineering Research (IJSER)*, vol. 4, pp. 120–128, September 2013.
- [66] M. A. Mirza, M. Y. Khuhawar, R. Arain, M. A. Choudhary, A. J. Kandhro, and T. M. Jahangir, "Micellar electrokinetic chromatographic separation/determination of uranium, iron, copper and nickel from environmental ore samples using bis(salicylaldehyde)meso-stilbenediimine as chelating reagent," *Asian Journal of Chemistry*, vol. 25, no. 7, pp. 3719–3724, 2013.
- [67] I. Panjwani, G. M. Arain, and M. Y. Khuhawar, "Liquid chromatographic determination of neurotransmitter serotonin from human cerebrospinal fluid using 2-hydroxynaphthaldehyde as derivatizing reagent," *Asian Journal of Chemistry*, vol. 25, no. 17, pp. 9452–9456, 2013.
- [68] A. A. Majidano, S. A. Majidano, M. Alamgir, and M. Y. Khuhawar, "Liquid chromatographic determination of dopamine, methyl dopa, l-dopa and tyrosine in pharmaceutical preparations using 2-hydroxynaphthaldehyde as a derivatizing reagent," *International Journal of Chemical and Environmental Engineering (IJCEE)*, vol. 4, no. 3, pp. 159–163, 2013.
- [69] A. J. Kandhro and M. Y. Khuhawar, "Hplc determination of guanidino compounds in serum of uremic patients using methylglyoxal as derivatizing reagent," *Journal of Liquid Chromatography and Related Technologies*, vol. 36, no. 16, pp. 2279–2291, 2013.
- [70] K. P. Mahar, K. U. Abbasi, M. Y. Khuhawar, G. M. Mastoi, A. H. Channer, S. B. Sahito, and A. J. Kandhro, "Hplc determination of alpha-keto acids in human serum and urine after derivatization with 4-nitro-1,2-phenylenediamine," *Pakistan Journal of Analytical and Environmental Chemistry*, vol. 14, no. 1, pp. 16–25, 2013.
- [71] K. P. Mahar, M. Y. Khuhawar, K. U. Abbasi, G. Q. Shar, R. Azmat, and J. A. Baig, "Hplc determination of alpha-keto acids from human serum using 2,3-diamino-2,3-dimethylbutane as derivatizing reagent," *Pakistan Journal of Analytical and Environmental Chemistry*, vol. 14, no. 2, pp. 8–15, 2013.
- [72] M. T. Mahar, M. Y. Khuhawar, T. M. Jahangir, and M. A. Baloch, "Heavy metal analysis in groundwater in the vicinity of distillery spent wash evaporation ponds," *Journal of Chemistry and Chemical Engineering*, vol. 7, no. 8, pp. 779–790, 2013.
- [73] M. T. Mahar, M. Y. Khuhawar, T. M. Jahangir, and M. A. Baloch, "Health risk assessment of heavy metals in groundwater: The effect of evaporation ponds of distillery spent wash," *Journal of Environmental Science and Engineering*, vol. 2, no. 3A, pp. 166–175, 2013.
- [74] R. A. Zounr, M. Y. Khuhawar, and T. M. Jahangir, "Gas chromatographic determination of guanidino compounds using hexafluoroacetylacetone and ethyl chloroformate as derivatizing reagents," *Chromatographia*, vol. 76, pp. 85–90, January 2013.
- [75] K. U. Abbasi, M. Y. Khuhawar, K. P. Mahar, A. Mallah, and A. N. Siyal, "Gas chromatographic determination of alpha-keto acids in pharmaceutical preparation using 1,2-propylenediamine as derivatizing reagent," *Asian Journal of Chemistry*, vol. 25, no. 3, pp. 1211–1215, 2013.
- [76] S. A. Majidano and M. Y. Khuhawar, "Gas chromatographic analysis of guanidino compounds in sera and urine of uremic patients using glyoxal and ethyl chloroformate as derivatizing reagents," *Analytical Sciences*, vol. 29, no. 2, pp. 221–226, 2013.
- [77] Z. M. Ali, A. J. Laghari, A. K. Ansari, and M. Y. Khuhawar, "Extraction and characterization of chitosan from indian prawn (*fenneropenaeus indicus*) and its applications on waste water treatment of local ghee industry," *IOSR Journal of Engineering (IOSRJEN)*, vol. 3, pp. 28–37, October 2013.
- [78] A. N. Siyal, S. Q. Memon, S. Parveen, A. Soomro, M. I. Khaskheli, and M. Y. Khuhawar, "Chemical recycling of expanded polystyrene waste: Synthesis of novel functional polystyrene-hydrazone surface for phenol removal," *Journal of Chemistry*, vol. 2013, p. 8, 2013.
- [79] T. M. Jahangir, M. Y. Khuhawar, S. M. Leghari, M. T. Mahar, and A. A. Khaskheli, "Chemical assessment of natural springs of sindh, pakistan," *Canadian Journal of Pure and Applied Sciences*, vol. 7, no. 2, pp. 2431–2449, 2013.
- [80] M. A. Mughal, A. Mughal, G. Z. Memon, M. Y. Khuhawar, and N. N. Memon, "Antimicrobial, thermoanalytical and viscometric studies of metal based schiff base polymer," *Journal of the Chemical Society of Pakistan*, vol. 35, pp. 1535–1542, December 2013.

- [81] M. A. Mughal, A. H. Mughal, Z. M. Ali, M. Y. Khuhawar, and H. Saleem, "Antimicrobial viscometric studies of thermally stable metal based schiff base polymer derived from 4, 4-methylene bis furfuraldehyde," *International Journal of Advancements in Research and Technology*, vol. 2, pp. 6–13, August 2013.
- [82] M. A. Mirza, A. J. Kandhro, M. Y. Khuhawar, R. Arain, M. A. Choudhary, and T. M. Jahangir, "Analysis of glyoxal, methylglyoxal and dimethylglyoxal in beverages and edible products by mekc using meso-stilbenediamine as derivatizing reagent," *Journal of the Chemical Society of Pakistan*, vol. 35, no. 1, pp. 52–57, 2013.
- [83] A. J. Laghari, Z. M. Ali, L. A. Zardari, and M. Y. Khuhawar, "New stationary phase material for gc separation of organic compounds," in *Energy, Environment and Sustainable Development* (M. A. Uqaili and K. Harijan, eds.), pp. 329–337, Springer Vienna, 2012.
- [84] K. P. Mahar, M. Y. Khuhawar, K. Abbasi, R. Azmat, G. M. Mastoi, and A. H. Channer, "High performance liquid chromatographic determination of alpha-keto acids from a pharmaceutical preparation (tablet) using 4-nitro-1, 2-phenylene diamine as a derivatizing reagent," *Pakistan Journal of Chemistry*, vol. 2, no. 1, pp. 29–33, 2012.
- [85] S. A. Majidano and M. Y. Khuhawar, "Gc determination of famotidine, ranitidine, cimetidine, and metformin in pharmaceutical preparations and serum using methylglyoxal as derivatizing reagent," *Chromatographia*, vol. 75, no. 21-22, pp. 1311–1317, 2012.
- [86] S. A. Majidano and M. Y. Khuhawar, "Gas chromatographic determination of guanidino compounds in uremic patients using glyoxal as derivatizing reagent," *Journal of Chromatographic Science*, vol. 50, no. 5, pp. 380–386, 2012.
- [87] A. Shah, M. Y. Khuhawar, and A. A. Shah, "Evaluation of sorption behavior of polymethylene-bis(2-hydroxybenzaldehyde) for cu(ii), ni(ii), fe(iii), co(ii) and cd(ii) ions," *Iranian Polymer Journal*, vol. 21, no. 5, pp. 325–334, 2012.
- [88] M. T. Mahar, M. Y. Khuhawar, M. A. Baloch, and T. M. Jahangir, "Effects of spent wash of ethanol industry on groundwater: A case study of rahim yar khan district, pakistan," *Journal of Environmental Science and Water Resources*, vol. 1, no. 4, pp. 85–94, 2012.
- [89] M. Y. Khuhawar, M. A. Mirza, and T. M. Jahangir, "Determination of metal ions in crude oils," in *Crude Oil Emulsions- Composition Stability and Characterization*, ch. 7, pp. 121–144, InTech, mar 2012.
- [90] A. Mallah, S. Q. Memon, A. R. Solangi, N. Memon, K. Abbasi, and M. Y. Khuhawar, "A novel micellar electrokinetic chromatographic method for separation of metal-ddtc complexes," *The Scientific World Journal*, vol. 2012, p. 8, 2012.
- [91] K. P. Mahar, M. Y. Khuhawar, T. G. Kazi, K. Abbasi, G. A. Shabir, and S. A. Arain, "A novel hplc method for the determination of alpha-keto acids in human serum using meso stillbenediamine as derivatization reagent," *Journal of Liquid Chromatography and Related Technologies*, vol. 35, no. 9, pp. 1245–1258, 2012.
- [92] M. I. Khaskheli, S. Q. Memon, A. N. Siyal, and M. Y. Khuhawar, "Use of orange peel waste for arsenic remediation of drinking water," *Waste and Biomass Valorization*, vol. 2, no. 4, pp. 423–433, 2011.
- [93] F. M. A. Rind, A. H. Memon, F. Almani, M. G. H. Laghari, U. R. Mughal, M. L. Maheshwari, and M. Y. Khuhawar, "Spectrophotometric determination of cinnamaldehyde from crude drugs and herbal preparations," *Asian Journal of Chemistry*, vol. 23, no. 2, pp. 631–635, 2011.
- [94] M. A. Mirza, M. A. Choudhary, A. J. Kandhro, M. Y. Khuhawar, R. Arain, and T. M. Jahangir, "Indirect determination of catecholamines in pharmaceutical preparations by flame atomic absorption spectrophotometry," *Asian Journal of Chemistry*, vol. 23, no. 12, pp. 5419–5421, 2011.
- [95] M. Y. Khuhawar, M. A. Baloch, T. M. Jahangir, M. T. Mahar, and S. A. Majidano, "Impacts of evaporation ponds of ethanol distillery spent wash on underground water," *Pakistan Journal of Chemistry*, vol. 1, no. 1, pp. 10–18, 2011.
- [96] K. P. Mahar, M. Y. Khuhawar, G. M. Mastoi, T. G. Kazi, K. Abbasi, and A. H. Channer, "Hplc determination of alpha-oxoaldehydes and alpha-oxoacids from human serum of diabetes and uremic patients using 4-nitro-1,2-phenylenediamine as derivetizing reagent," *Asian Journal of Chemistry*, vol. 23, no. 7, pp. 3104–3108, 2011.
- [97] M. Y. Khuhawar and S. A. Majidano, "Gc analysis of amino acids using trifluoroacetylacetone and ethyl chloroformate as derivatizing reagents in skin samples of psoriatic and arsenicosis patients," *Chromatographia*, vol. 73, no. 7-8, pp. 701–708, 2011.
- [98] K. U. Abbasi, M. Y. Khuhawar, M. I. Bhangar, K. P. Mahar, and A. H. Channer, "Ethyl chloroformate as derivatizing reagent for gas chromatographic determination of alpha-keto acids and amino acids from pharmaceutical preparation," *Journal of the Chemical Society of Pakistan*, vol. 33, pp. 778–782, October 2011.
- [99] G. M. Mastoi, M. Y. Khuhawar, K. Abbasi, M. Akhtar, S. Naz, H. Khan, A. Mallah, and Z. Memon, "Development of new spectrophotometric determination of titanium in homeopathic pharmacy using ponceau s as a reagent," *African Journal of Pharmacy and Pharmacology*, vol. 5, pp. 1182–1184, August 2011.
- [100] A. R. Solangi, S. Q. Memon, A. Mallah, N. Memon, M. Y. Khuhawar, and M. I. Bhangar, "Development and implication of a capillary electrophoresis methodology for ciprofloxacin, paracetamol and diclofenac sodium in pharmaceutical formulations and simultaneously in human urine sample," *Pakistan Journal of Pharmaceutical Sciences (PJPS)*, vol. 24, pp. 539–544, October 2011.

- [101] A. J. Laghari, Z. M. Ali, M. N. Bughio, F. A. Shah, L. A. Zardari, and M. Y. Khuhawar, "Capillary gas chromatographic separation of copper, mercury, lead and cadmium as complexes of pyrrolidine dithiocarbamate," *Australian Journal of Basic and Applied Sciences*, vol. 5, pp. 1108–1111, May 2011.
- [102] M. Y. Khuhawar and S. A. Majidano, "An investigation of quality of groundwater of taluka nawabshah," *Pakistan Journal of Chemistry*, vol. 1, pp. 65–71, June 2011.
- [103] F. Almani, F. M. A. Rind, A. H. Memon, U. R. Mughal, M. G. H. Laghari, N. Memon, M. L. Maheshwari, and M. Y. Khuhawar, "Spectrophotometric determination of amlodipine besylate using 2-hydroxynaphthaldehyde as a derivatizing reagent," *Asian Journal of Chemistry*, vol. 22, pp. 1205–1213, February 2010.
- [104] K. P. Mahar, M. Y. Khuhawar, T. G. Kazi, K. Abbasi, and A. H. Channar, "Quantitative analysis of glyoxal, methyl glyoxal and dimethyl glyoxal from foods, beverages and wines using hplc and 4-nitro-1,2- phenylenediamine as derivatizing reagent," *Asian Journal of Chemistry*, vol. 22, no. 9, pp. 6983–6990, 2010.
- [105] S. A. Majidano, M. Y. Khuhawar, and A. H. Channar, "Quality assessment of surface and groundwater of taluka daur, district nawabshah, sindh, pakistan," *Journal of the Chemical Society of Pakistan*, vol. 32, no. 6, pp. 744–752, 2010.
- [106] A. J. Laghari, Z. M. Ali, F. A. Shah, L. A. Zardari, and M. Y. Khuhawar, "Pyrrolidinedithiocarbamate as a reagent for gc analysis of metal ions," *Australian Journal of Basic and Applied Sciences*, vol. 4, pp. 6046–6051, December 2010.
- [107] A. Mallah, S. Q. Memon, A. R. Solangi, M. Y. Khuhawar, and M. I. Bhangar, "Micellar electrokinetic chromatographic separation and analysis of thorium, uranium, gold, and mercury in environmental ore samples," *Acta Chromatographica*, vol. 22, pp. 405–417, September 2010.
- [108] A. H. Channar, K. P. Mahar, M. Y. Khuhawar, S. A. Majidano, and M. S. Khan, "Lightscattering and viscosities measurements of dilute solutions of some schiff base polymers," *Journal of the Chemical Society of Pakistan*, vol. 32, no. 2, pp. 156–161, 2010.
- [109] M. Y. Khuhawar, R. A. Gilal, F. M. A. Rind, A. H. Memon, and M. U. Memon, "Hplc determination of putrescine and cadaverine in serum of cancer patients using acetylacetone as derivatizing reagent," *Journal of the Chemical Society of Pakistan*, vol. 32, no. 2, pp. 176–179, 2010.
- [110] A. J. Kandhro and M. Y. Khuhawar, "Hplc determination of guanidino compounds in serum of uremic patients using pyridoin as derivatizing reagent," *Journal of Liquid Chromatography and Related Technologies*, vol. 33, no. 14, pp. 1393–1404, 2010.
- [111] K. U. Abbasi, M. Y. Khuhawar, and M. I. Bhangar, "Gas chromatographic analysis of tranexamic acid in pharmaceutical preparation using ethyl chloroformate as derivatizing reagent," *Journal of the Chemical Society of Pakistan*, vol. 32, no. 3, pp. 301–305, 2010.
- [112] A. J. Kandhro, M. A. Mirza, and M. Y. Khuhawar, "Determination of guanidino compounds in serum by micellar electrokinetic capillary chromatography using benzoin as the derivatizing reagent," *Analytical Letters*, vol. 43, no. 13, pp. 2049–2060, 2010.
- [113] A. Solangi, S. Memon, A. Mallah, N. Memon, M. Y. Khuhawar, and M. I. Bhangar, "Determination of ceftriaxone, ceftizoxime, paracetamol, and diclofenac sodium by capillary zone electrophoresis in pharmaceutical formulations and in human blood serum," *Turkish Journal of Chemistry*, vol. 34, no. 6, pp. 921–933, 2010.
- [114] M. Y. Khuhawar, L. A. Zardari, S. A. Majidano, and A. A. Majidano, "Capillary gas chromatographic determination of dopamine by pre-column derivatization method using trifluoroacetylacetone as derivatizing reagent," *Journal of the Chemical Society of Pakistan*, vol. 32, no. 6, pp. 781–785, 2010.
- [115] A. J. Laghari, M. Y. Khuhawar, Z. M. Ali, and L. A. Zardari, "Bis(isovalerylacetone)ethylenediimine nickel(ii) as mixed stationary phase for gas chromatography," *Journal of Chromatographic Science*, vol. 48, pp. 303–309, April 2010.
- [116] S. A. Majidano, G. M. Arain, D. R. Bajaj, P. Iqbal, and M. Y. Khuhawar, "Assessment of groundwater quality with focus on arsenic contents and consequences. case study of tando allahyar district in sindh province," *International Journal of Chemical and Environmental Engineering (IJCEE)*, vol. 1, no. 2, pp. 91–96, 2010.
- [117] A. Balouch, N. Memon, M. I. Bhangar, and M. Y. Khuhawar, "Utilization of picolinaldehyde-4-phenyl-3-thiosemicarbazone in sodium dodecylsulfate micelles for the spectrophotometric determination of iron, vanadium, and cobalt following partial least-squares regression analysis," *Journal of AOAC International*, vol. 92, pp. 248–256, January 2009.
- [118] J. ur Rahman Memon, S. Q. Memon, M. I. Bhangar, and M. Y. Khuhawar, "Use of modified sorbent for the separation and preconcentration of chromium species from industrial waste water," *Journal of Hazardous Materials*, vol. 163, pp. 511–516, April 2009.
- [119] M. Y. Khuhawar, A. Shah, and A. A. Shah, "Synthesis, characterization and metal uptake study of cu and cd on poly-5, 5'-methylene-bis-(2-hydroxy benzaldehyde) ethylenediimine," *Journal of the Chemical Society of Pakistan*, vol. 31, pp. 900–906, December 2009.
- [120] F. M. A. Rind, M. G. H. Laghari, A. H. Memon, U. R. Mughal, F. Almani, N. Memon, M. Y. Khuhawar, and M. L. Maheshwari, "Spectrophotometric determination of tranexamic acid using vanillin," *Acta pharmaceutica Sinica (Yao xue xue bao)*, vol. 44, no. 2, pp. 175–180, 2009.

- [121] F. M. A. Rind, U. R. Mughal, A. H. Memon, F. Almani, M. G. H. Laghari, M. L. Maheshwari, M. Y. Khuhawar, N. Memon, and A. Dayo, "Spectrophotometric analysis of vanillin from natural and synthetic sources," *Asian Journal of Chemistry*, vol. 21, no. 4, pp. 2849–2856, 2009.
- [122] M. A. Mahar, S. I. H. Jafri, S. M. Leghari, and M. Y. Khuhawar, "Seasonal periodicity of phytoplankton and chlorophyll content in lake manchar," *Pakistan Journal of Botany*, vol. 41, pp. 871–884, April 2009.
- [123] A. R. Solangi, S. Q. Memon, A. Mallah, M. Y. Khuhawar, and M. I. Bhangar, "Quantitative separation of oxytocin, norfloxacin and diclofenac sodium in milk samples using capillary electrophoresis," *Biomedical Chromatography*, vol. 23, pp. 1007–1013, September 2009.
- [124] A. Shah, M. Y. Khuhawar, and A. A. Shah, "Preparation and characterization of schiff base polythioamides derived from [4,4'-methylenebis(cinnamaldehyde)] by willgerodt-kindler reaction," *Iranian Polymer Journal*, vol. 18, no. 3, pp. 217–225, 2009.
- [125] M. A. Mirza, A. J. Kandhro, M. Y. Khuhawar, and R. Arain, "Mec determination of vanadium from mineral ore and crude petroleum oil samples using precapillary chelation with bis(salicylaldehyde)tetramethyl-ethylenediimine," *Journal of Separation Science*, vol. 32, pp. 3169–3177, September 2009.
- [126] M. Y. Khuhawar, M. A. Mirza, S. M. Leghari, and R. Arain, "Limnological study of baghsar lake district bhimber azad kashmir," *Pakistan Journal of Botany*, vol. 41, pp. 1903–1915, August 2009.
- [127] S. M. Mahesar, M. U. Dahot, M. Y. Khuhawar, and J. Anwar, "Identification and quantification of amino acids from psoriatic and normal epidermis by high performance liquid chromatography," *Pakistan Journal of Biotechnology (PJBt)*, vol. 6, no. 1-2, pp. 11–19, 2009.
- [128] M. A. Mirza, M. Y. Khuhawar, and R. Arain, "Hydrochemical profile of banjosa lake poonch, kashmir," *Asian Journal of Chemistry*, vol. 21, no. 5, pp. 3651–3659, 2009.
- [129] K. Abbasi, M. I. Bhangar, and M. Y. Khuhawar, "Ethyl chloroformate as derivatizing reagent for gas chromatographic determination of norephedrine, ephedrine and pseudoephedrine in pharmaceutical preparation," *Asian Journal of Chemistry*, vol. 21, no. 2, pp. 1145–1154, 2009.
- [130] G. H. Burdi, W. A. Baloch, F. Begum, A. N. Soomro, and M. Y. Khuhawar, "Ecological studies on freshwater bivalve mussels (pelecypoda) of indus river and its canals at kotri barrage sindh, pakistan," *Sindh University Research Journal (Science Series)*, vol. 41, no. 1, pp. 31–36, 2009.
- [131] S. A. Majidano and M. Y. Khuhawar, "Distribution of heavy metals in the ground water of taluka daur, district nawabshah, sindh, pakistan, and its impacts on human health," *Journal of the Chemical Society of Pakistan*, vol. 31, no. 3, pp. 408–414, 2009.
- [132] K. U. Abbasi, M. Y. Khuhawar, and M. I. Bhangar, "Determination of tranexamic acid using ethyl chloroformate as derivatizing reagent in pharmaceutical preparations and blood by gc," *Chromatographia*, vol. 70, no. 11-12, pp. 1749–1754, 2009.
- [133] A. R. Solangi, A. Mallah, M. Y. Khuhawar, and M. I. Bhangar, "Cathodic stripping voltammetry of pipemidic acid and ofloxacin in pharmaceutical dosages and human urine," *Journal of the Iranian Chemical Society*, vol. 6, pp. 71–76, March 2009.
- [134] K. P. Mahar, M. Y. Khuhawar, T. G. Kazi, and G. M. Mastoi, "Catalytic decomposition of ponceau s for the kinetic spectrophotometric determination of gallium (iii)," *Journal of the Chemical Society of Pakistan*, vol. 31, no. 1, pp. 171–174, 2009.
- [135] L. A. Zardari, M. Y. Khuhawar, and A. J. Laghari, "Capillary gc analysis of glyoxal and methylglyoxal in the serum and urine of diabetic patients after use of 2,3-diamino-2,3-dimethylbutane as derivatizing reagent," *Chromatographia*, vol. 70, pp. 891–897, July 2009.
- [136] A. R. Solangi, M. I. Bhangar, S. Q. Memon, M. Y. Khuhawar, and A. Mallah, "A capillary zone electrophoretic method for simultaneous determination of seven drugs in pharmaceuticals and in human urine," *Journal of AOAC International*, vol. 92, pp. 1382–1389, September 2009.
- [137] F. M. A. Rind, M. G. H. Laghari, A. H. Memon, U. R. Mughal, F. Almani, N. Memon, M. Y. Khuhawar, and M. L. Maheshwari, "Spectrophotometric determination of ceftriaxone using 4-dimethylaminobenzaldehyde," *Pakistan Journal of Analytical and Environmental Chemistry*, vol. 9, no. 1, pp. 43–48, 2008.
- [138] M. A. Mirza, M. Y. Khuhawar, and R. Arain, "Quality and distribution of lead and cadmium in underground water of kashmir," *Asian Journal of Chemistry*, vol. 20, no. 8, pp. 5915–5923, 2008.
- [139] S. A. Majidano, A. A. Majidano, and M. Y. Khuhawar, "Physico-chemical study of surface and ground water of taluka nawabshah, district nawabshah, sindh, pakistan," *Journal of the Chemical Society of Pakistan*, vol. 30, pp. 950–953, December 2008.
- [140] G. M. Arain and M. Y. Khuhawar, "Liquid chromatographic analysis of mercury(ii) and cadmium(ii) using dimethylglyoxal bis-(4-phenyl-3-thiosemicarbazone) as derivatizing reagent," *Acta Chromatographica*, vol. 20, pp. 25–41, March 2008.
- [141] A. J. Laghari, M. Y. Khuhawar, L. A. Zardari, and A. G. Bhatti, "Gc determination of cisplatin in serum and urine of cancer patients after chemotherapy as platinum (ii) pyrrolidinedithiocarbamate chelate," *Chromatographia*, vol. 67, pp. 749–754, May 2008.

- [142] M. Y. Khuhawar and L. A. Zardari, "Ethyl chloroformate as a derivatizing reagent for the gas chromatographic determination of isoniazid and hydrazine in pharmaceutical preparations," *Analytical Sciences*, vol. 24, no. 11, pp. 1493–1496, 2008.
- [143] M. Y. Khuhawar, L. A. Zardari, and A. J. Laghari, "Ethyl chloroformate as a derivatizing reagent for capillary gc determination of dopamine, adrenaline, putrescine, and histamine," *Chromatographia*, vol. 67, pp. 847–851, May 2008.
- [144] J. R. Memon, S. Q. Memon, M. I. Bhangar, M. Y. Khuhawar, G. C. Allen, G. Z. Memon, and A. G. Pathan, "Efficiency of cd(ii) removal from aqueous media using chemically modified polystyrene foam," *European Polymer Journal*, vol. 44, pp. 1501–1511, May 2008.
- [145] G. H. Burdi, W. A. Baloch, F. Begum, A. N. Soomro, and M. Y. Khuhawar, "Ecological studies on freshwater gastropods (snails) of indus river and its canals at kotri barrage, sindh, pakistan," *Sindh University Research Journal (Science Series)*, vol. 40, pp. 37–40, December 2008.
- [146] M. A. Mirza, M. Y. Khuhawar, and R. Arain, "Determination of uranium, iron, copper, and nickel in rock and water samples by mekc," *Journal of Separation Science*, vol. 31, no. 16-17, pp. 3037–3044, 2008.
- [147] M. A. Mirza, M. Y. Khuhawar, and R. Arain, "Determination of uranium, iron, copper, and nickel from ore samples by mekc using n,n'-ethylene bis(salicylaldimine) as complexing reagent," *Electrophoresis*, vol. 29, pp. 597–603, February 2008.
- [148] A. H. Memon, F. M. A. Rind, M. G. H. Laghari, U. R. Mughal, N. Memon, R. A. Gilal, M. Y. Khuhawar, and F. Almani, "Common folk medicinal and ethnomedicinal uses of thirty medicinal plants of districts dadu and jamshoro, sindh, pakistan," *Sindh University Research Journal (Science Series)*, vol. 40, pp. 89–108, December 2008.
- [149] F. M. A. Rind, A. H. Memon, U. R. Mughal, F. Almani, M. G. H. Laghari, M. Y. Khuhawar, M. L. Maheshwari, and A. Dayo, "Colorimetric determination of citral from crude drugs, soft drinks, herbal, homeopathic and pharmaceutical preparations," *The Science International (Lahore)*, vol. 20, no. 2, pp. 117–121, 2008.
- [150] K. Abbasi, M. I. Bhangar, and M. Y. Khuhawar, "Capillary-gas chromatographic determination of phenylpropanolamine using acetylacetone as derivatizing reagent in pharmaceutical preparations," *Journal of the Chemical Society of Pakistan*, vol. 30, pp. 692–695, October 2008.
- [151] M. Y. Khuhawar, L. A. Zardari, and A. J. Laghari, "Capillary gas chromatographic determination of methylglyoxal from serum of diabetic patients by precolumn derivatization with 1,2-diaminopropane," *Journal of Chromatography B*, vol. 873, pp. 15–19, September 2008.
- [152] A. J. Kandhro, M. A. Mirza, and M. Y. Khuhawar, "Capillary gas chromatographic determination of methylglyoxal from serum of diabetic patients by precolumn derivatization using meso-stilbenediamine as derivatizing reagent," *Journal of Chromatographic Science*, vol. 46, pp. 539–543, July 2008.
- [153] M. Y. Khuhawar, L. A. Zardari, and A. J. Laghari, "Capillary gas chromatographic determination of isoniazid in pharmaceutical preparation by pre-column derivatization with acetylacetone," *Asian Journal of Chemistry*, vol. 20, no. 8, pp. 5997–6006, 2008.
- [154] J. R. Memon, S. Q. Memon, M. I. Bhangar, and M. Y. Khuhawar, "Banana peel: A green and economical sorbent for cr(iii) removal," *Pakistan Journal of Analytical and Environmental Chemistry*, vol. 9, no. 1, pp. 20–25, 2008.
- [155] G. M. Mastoi, S. G. S. Shah, and M. Y. Khuhawar, "Assessment of water quality of manchar lake in sindh (pakistan)," *Environmental Monitoring and Assessment*, vol. 141, pp. 287–296, June 2008.
- [156] S. M. Leghari, M. A. Mahar, M. Y. Khuhawar, and T. M. Jahangir, "Water quality assessment and flora study of desert thar and nagarparkar, district tharparkar, sindh, pakistan," *Sindh University Research Journal (Science Series)*, vol. 39, no. 1, pp. 49–56, 2007.
- [157] S. M. Leghari, M. A. Mahar, M. Y. Khuhawar, and T. M. Jahangir, "Water quality and floral assessment of pat desert of sanghar and khairpur districts, sindh, pakistan," *International Journal of Phycology and Phycochemistry*, vol. 3, pp. 65–70, 2007.
- [158] S. Q. Memon, M. I. Bhangar, S. M. Hasany, and M. Y. Khuhawar, "The efficacy of nitrosonaphthol functionalized xad-16 resin for the preconcentration/sorption of ni(ii) and cu(ii) ions," *Talanta*, vol. 72, pp. 1738–1745, July 2007.  
Special Issue on China-Japan-Korea Environmental Analysis C-J-K Environmental.
- [159] G. M. Arain, I. Devi, and M. Y. Khuhawar, "Spectrophotometric determination of gallium(iii) as bipyridylglyoxal bis(4-phenyl-3-thiosemicarbazone) derivative," *Asian Journal of Chemistry*, vol. 19, no. 7, pp. 5169–5176, 2007.
- [160] A. D. Rajpar, G. M. Arain, F. M. A. Rind, and M. Y. Khuhawar, "Spectrophotometric and liquid chromatographic determination of dopamine from pharmaceutical preparations using 2-hydroxynaphthaldehyde as derivatizing reagent," *Asian Journal of Chemistry*, vol. 19, no. 6, pp. 4817–4824, 2007.
- [161] S. Q. Memon, N. Memon, S. W. Shah, M. Y. Khuhawar, and M. I. Bhangar, "Sawdust - a green and economical sorbent for the removal of cadmium (ii) ions," *Journal of Hazardous Materials*, vol. 139, no. 1, pp. 116–121, 2007.
- [162] A. R. Solangi, S. Q. Memon, M. Y. Khuhawar, and M. I. Bhangar, "Quantitative analysis of eight cephalosporin antibiotics in pharmaceutical products and urine by capillary zone electrophoresis," *Acta Chromatographica*, vol. 19, no. 1, pp. 81–96, 2007.
- [163] M. A. Mirza, M. Y. Khuhawar, and R. Arain, "Quality of spring water in the catchment areas of the indus river," *Asian Journal of Chemistry*, vol. 19, no. 7, pp. 5279–5304, 2007.

- [164] M. Y. Khuhawar, A. Shah, and M. A. Mughal, "Preparation and characterization of schiff base polymers derived from 4,4'-methylenebis(cinnamaldehyde)," *Chinese Journal of Polymer Science (CJPS)*, vol. 25, pp. 399–407, July 2007.
- [165] A. J. Laghari, M. Y. Khuhawar, and Z. M. Ali, "Palladium(ii) chelate of tetradentate schiff base as mixed stationary phase for gas chromatography," *Journal of Separation Science*, vol. 30, pp. 359–366, February 2007.
- [166] M. A. Mahar, S. M. Leghari, M. Y. Khuhawar, and M. A. Abbasi, "Microcystis kutzing ex lemmermann (cyanophyta) as pollution indicator in keenghar lake, pakistan," *International Journal of Phycology and Phycochemistry*, vol. 3, no. 1, pp. 91–96, 2007.
- [167] M. Y. Khuhawar and G. M. Arain, "Liquid chromatographic determination of cobalt(ii), nickel(ii) and silver(i) using 6-methyl-2-pyridine carboxaldehyde isonicotinoyl hydrazone as derivatizing reagent," *Asian Journal of Chemistry*, vol. 19, no. 2, pp. 1319–1328, 2007.
- [168] G. M. Mastoi and M. Y. Khuhawar, "Kinetic spectrophotometric determination of vanadium (v) using ponceau 's'," *Eurasian Journal of Analytical Chemistry*, vol. 2, no. 2, pp. 68–77, 2007.
- [169] F. N. Talpur, M. I. Bhangar, and M. Y. Khuhawar, "Intramuscular fatty acid profile of longissimus dorsi and semitendinosus muscle from kundi steers fed on pasture with cottonseed cake supplement," *International Journal of Food Science and Technology*, vol. 42, pp. 1007–1011, August 2007.
- [170] M. A. Mirza, A. J. Kandhro, S. Q. Memon, M. Y. Khuhawar, and R. Arain, "Determination of glyoxal and methylglyoxal in the serum of diabetic patients by mekc using stilbenediamine as derivatizing reagent," *Electrophoresis*, vol. 28, pp. 3940–3947, November 2007.
- [171] M. A. Mirza, G. M. Arain, M. Y. Khuhawar, and R. Arain, "Chemistry of torrent water in azad jammu and kashmir, pakistan," *The Nucleus*, vol. 44, no. 1-2, pp. 25–31, 2007.
- [172] A. J. Laghari, M. Y. Khuhawar, and L. A. Zardari, "Capillary gas chromatographic analysis of pyrrolidinedithiocarbamate metal chelates," *Journal of Separation Science*, vol. 30, pp. 2727–2732, November 2007.
- [173] G. M. Arain, M. Aslam, S. A. Majidano, and M. Y. Khuhawar, "A preliminary study on the arsenic contamination of underground water of matiari and khairpur districts, sindh, pakistan," *Journal of the Chemical Society of Pakistan*, vol. 29, pp. 463–467, October 2007.
- [174] G. M. Mastoi, M. Y. Khuhawar, and R. B. Bozdar, "Spectrophotometric determination of vanadium in crude oil," *Journal of Quantitative Spectroscopy and Radiative Transfer*, vol. 102, pp. 236–240, November 2006.
- [175] M. Y. Khuhawar, F. M. A. Rind, K. F. Almani, and A. D. Rajper, "Spectrophotometric determination of tranexamic acid in dosage forms by derivatization," *Journal of the Chemical Society of Pakistan*, vol. 28, no. 5, pp. 435–438, 2006.
- [176] M. Khuhawar, A. Rajper, and F. Rind, "Spectrophotometric and liquid chromatographic determination of dopamine from pharmaceutical preparations using acetyl acetone as derivatizing reagent," *Pakistan Journal of Pharmaceutical Sciences (PJPS)*, vol. 19, no. 4, pp. 286–289, 2006.
- [177] V. Dewani, A. Rajper, M. Khuhawar, and I. Ansari, "Speciation of metal contents in sediments of a sewage contaminated canal," *Scientific Sindh (Research Journal Shah Abdul Latif University Khairpur, Sindh)*, vol. 13, pp. 1–14, 2006.
- [178] S. Q. Memon, M. I. Bhangar, S. M. Hasany, and M. Y. Khuhawar, "Sorption behavior of impregnated styrofoam for the removal of cd(ii) ions," *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, vol. 279, no. 1-3, pp. 142–148, 2006.
- [179] M. Y. Khuhawar and G. M. Arain, "Liquid chromatographic determination of vanadium in petroleum oils and mineral ore samples using 2-acetylpyridine-4-phenyl-3-thiosemicarbazone as derivatizing reagent," *Talanta*, vol. 68, no. 3, pp. 535–541, 2006.
- [180] M. Y. Khuhawar, A. J. Kandhro, and F. D. Khand, "Liquid chromatographic determination of glyoxal and methylglyoxal from serum of diabetic patients using meso-stilbenediamine as derivatizing reagent," *Analytical Letters*, vol. 39, no. 10, pp. 2205–2215, 2006.
- [181] S. M. Leghari, M. A. Mahar, M. Y. Khuhawar, and T. M. Jahangir, "Limnological study of hanna lake and urak spring of quetta, balochistan, pakistan," *International Journal of Phycology and Phycochemistry*, vol. 2, no. 1, pp. 33–38, 2006.
- [182] M. A. Mirza and M. Y. Khuhawar, "Hydrochemistry of snowmelt in sudhanoti and poonch districts of azad jammu and kashmir, pakistan," *Sindh University Research Journal (Science Series)*, vol. 38, pp. 25–32, December 2006.
- [183] S. N. Lanjwani, R. Zhu, M. Y. Khuhawar, and Z. Ding, "High performance liquid chromatographic determination of platinum in blood and urine samples of cancer patients after administration of cisplatin drug using solvent extraction and n,n'-bis(salicylidene)-1,2-propanediamine as complexation reagent," *Journal of Pharmaceutical and Biomedical Analysis*, vol. 40, pp. 833–839, March 2006.
- [184] F. N. Talpur, M. I. Bhangar, and M. Y. Khuhawar, "Comparison of fatty acids and cholesterol content in the milk of pakistani cow breeds," *Journal of Food Composition and Analysis*, vol. 19, no. 6-7, pp. 698–703, 2006.  
Biodiversity and nutrition: a common path Biodiversity and nutrition: a common path.
- [185] M. A. Mirza, G. M. Arain, and M. Y. Khuhawar, "Comparative physicochemical study of five main ponds of districts bhimber azad jammu and kashmir," *Journal of the Chemical Society of Pakistan*, vol. 28, no. 5, pp. 430–434, 2006.

- [186] A. R. Solangi, A. Mallah, M. Y. Khuhawar, and M. I. Bhangar, "Cathodic stripping voltammetric determination of cefadroxil in pharmaceutical preparations and in blood serum," *Pakistan Journal of Analytical and Environmental Chemistry*, vol. 7, no. 2, pp. 107–111, 2006.
- [187] K. Abbasi, M. I. Bhangar, and M. Y. Khuhawar, "Capillary gas chromatographic determination of phenylpropanolamine in pharmaceutical preparation," *Journal of Pharmaceutical and Biomedical Analysis*, vol. 41, pp. 998–1001, June 2006.
- [188] M. Y. Khuhawar and L. A. Zardari, "Capillary gas chromatographic determination of isoniazid in pharmaceutical preparations and blood by precolumn derivatization with trifluoroacetylacetone," *Journal of Food and Drug Analysis (JFDA)*, vol. 14, no. 4, pp. 323–328, 2006.
- [189] F. M. A. Rind, M. Y. Khuhawar, K. F. Almani, and A. D. Rajpar, "Spectrophotometric determination of isoniazid in dosage forms by derivatization," *Pakistan Journal of Analytical and Environmental Chemistry*, vol. 6, no. 2, pp. 84–88, 2005.
- [190] S. Q. Memon, M. I. Bhangar, and M. Y. Khuhawar, "Sorption profile and thermodynamic characteristics of nitrosonaphthol functionalized sorbent for metal ion enrichment," *Collection of Czechoslovak Chemical Communications*, vol. 70, no. 9, pp. 1341–1356, 2005.
- [191] S. M. Leghari, M. Y. Khuhawar, T. M. Jahangir, and A. Leghari, "Some studies on young natural spring of thana bula khan, district dadu, sindh, pakistan," *International Journal of Phycology and Phycochemistry*, vol. 1, pp. 167–172, 2005.
- [192] M. Y. Khuhawar, I. A. Ansari, and V. K. Dewani, "Sediment analysis of sewage contaminated canal," *Journal of the Chemical Society of Pakistan*, vol. 27, pp. 154–159, April 2005.
- [193] M. A. Mirza, M. Y. Khuhawar, and A. J. Kandhro, "Quality of rain water and its suitability for drinking and agricultural use in district bhimber azad kashmir, pakistan," *Pakistan Journal of Analytical and Environmental Chemistry*, vol. 6, no. 2, pp. 72–79, 2005.
- [194] S. Q. Memon, M. I. Bhangar, and M. Y. Khuhawar, "Preconcentration and separation of cr(iii) and cr(vi) using sawdust as a sorbent," *Analytical and Bioanalytical Chemistry*, vol. 383, pp. 619–624, October 2005.
- [195] M. Y. Khuhawar, P. Das, and V. K. Dewani, "Preconcentration and atomic adsorption spectrometric determination of cadmium, cobalt, copper, iron, lead, manganese, nickel and zinc in water samples using 6-methyl-2-pyridinecarboxaldehyde-4-phenyl-3-thiosemicarbazone," *Journal of the Chemical Society of Pakistan*, vol. 27, pp. 160–162, April 2005.
- [196] A. Leghari, S. N. Chandio, M. Y. Khuhawar, T. M. Jahangir, and S. M. Leghari, "Physicochemical and budgeting study of waste water from latifabad and qasimabad tulkas of hyderabad, sindh, pakistan," *Sindh University Research Journal (Science Series)*, vol. 37, no. 2, pp. 25–32, 2005.
- [197] M. Y. Khuhawar and G. M. Arain, "Liquid chromatographic determination of cis-platin as platinum(ii) in pharmaceutical preparation, serum and urine samples of cancer patients," *Talanta*, vol. 66, pp. 34–39, March 2005.
- [198] S. M. Leghari, M. Y. Khuhawar, T. M. Jahangir, and A. Leghari, "Limnological study of pir bukhari (karsaz) and mangopir warm springs, karachi, sindh, pakistan," *International Journal of Phycology and Phycochemistry*, vol. 1, pp. 151–158, 2005.
- [199] S. M. Leghari, M. Y. Khuhawar, T. M. Jahangir, and A. Leghari, "Limnological study of natural springs at ghara creek, district thatta, sindh, pakistan," *International Journal of Phycology and Phycochemistry*, vol. 1, pp. 37–42, 2005.
- [200] S. M. Leghari, A. D. Rajper, M. Y. Khuhawar, T. M. Jahangir, and A. Leghari, "Limnological study of lakha pir hot spring, district kachi, balochistan, pakistan," *Sindh University Research Journal (Science Series)*, vol. 12, pp. 7–16, 2005.
- [201] M. Y. Khuhawar, F. M. A. Rind, and A. D. Rajper, "High-performance liquid chromatographic determination of isoniazid, pyrazinamide, and indomethacin in pharmaceutical preparations," *Acta Chromatographica*, vol. 15, pp. 269–275, 2005.
- [202] S. Q. Memon, S. M. Hasany, M. I. Bhangar, and M. Y. Khuhawar, "Enrichment of pb(ii) ions using phthalic acid functionalized xad-16 resin as a sorbent," *Journal of Colloid and Interface Science*, vol. 291, pp. 84–91, November 2005.
- [203] S. Q. Memon, N. Memon, M. I. Bhangar, and M. Y. Khuhawar, "Enrichment of indium from aqueous solution using functionalized sorbent," *Indian Journal of Chemistry*, vol. 44A, pp. 1197–1202, June 2005.
- [204] N. Memon, M. I. Bhangar, and M. Y. Khuhawar, "Determination of preservatives in cosmetics and food samples by micellar liquid chromatography," *Journal of Separation Science*, vol. 28, no. 7, pp. 635–638, 2005.
- [205] M. Y. Khuhawar, F. M. A. Rind, and A. Rajper, "Determination of phenylpropanolamine in pharmaceutical preparations by second derivative spectrophotometry," *Journal of Food and Drug Analysis (JFDA)*, vol. 13, no. 4, pp. 388–391, 2005.
- [206] A. R. Solangi, M. Y. Khuhawar, and M. I. Bhangar, "Adsorptive stripping voltammetric determination of fluoroquinolones in pharmaceuticals," *Journal of Food and Drug Analysis (JFDA)*, vol. 13, no. 3, pp. 201–204, 2005.
- [207] S. M. Mahesar, M. U. Dahot, M. Y. Khuhawar, and H. Mahesar, "Variation profile of low-density lipoproteins cholesterol (ldlc) in severe psoriatic patients," *Pakistan Journal of Analytical and Environmental Chemistry*, vol. 5, no. 2, pp. 65–67, 2004.
- [208] M. Y. Khuhawar, M. A. Mughal, and A. H. Channar, "Synthesis and characterization of some new schiff base polymers," *European Polymer Journal*, vol. 40, pp. 805–809, April 2004.



- [209] N. A. Channa, F. D. Khand, M. Y. Khuhawar, and M. I. Bhangar, "Study of some metal elements in four chemically different types of human gallstones," *Journal of the Chemical Society of Pakistan*, vol. 26, pp. 123–126, June 2004.
- [210] M. Y. Khuhawar, G. M. Arain, and A. Shah, "Spectrophotometry determination of platinum (ii) from platinum based cis-platin and carbo-platin anticancer injections," *The Nucleus*, vol. 41, no. 1-4, pp. 59–62, 2004.
- [211] I. Devi, S. A. Memon, and M. Y. Khuhawar, "Spectrophotometric analysis of vitamin e using cu(i)-bathocuproine or/and fe(ii)-2,4,6-tris-(2'-pyridyl)-s-triazine complexes," *Journal of the Chemical Society of Pakistan*, vol. 26, pp. 239–243, September 2004.
- [212] A. Laghari, S. N. Chandio, M. Y. Khuhawar, T. M. Jahangir, and S. M. Laghari, "Physico-chemical study and budgeting of wastewater from hyderabad city limits," *Journal of Biological Sciences*, vol. 4, no. 3, pp. 317–322, 2004.
- [213] M. Y. Khuhawar, S. N. Lanjwani, and T. M. Jahangir, "Liquid chromatography of uranium complexes of tetradentate schiff bases," *Analytical Sciences*, vol. 20, no. 8, pp. 1193–1197, 2004.
- [214] A. Laghari, S. N. Chandio, M. Y. Khuhawar, T. M. Jahangir, and S. M. Laghari, "Effect of wastewater on the quality of ground water from southern parts of hyderabad city," *Journal of Biological Sciences*, vol. 4, no. 3, pp. 314–316, 2004.
- [215] S. M. Mahesar, M. U. Dahot, M. Y. Khuhawar, and H. Mahesar, "Comparative and quantitative determination of total hemoglobin concentration in normal and psoriatic patients," *Pakistan Journal of Analytical and Environmental Chemistry*, vol. 5, no. 1, pp. 34–37, 2004.
- [216] S. M. Leghari, T. M. Jahangir, M. Y. Khuhawar, and A. Leghari, "Biological and chemical investigations of natural springs of rannikot, district dadu, sindh, pakistan," in *Proceedings of Pakistan Congress of Zoology* (D. M. Ahmad and D. A. Shakoori, eds.), vol. 24, pp. 37–50, 2004.
- [217] V. K. Dewani, I. A. Ansari, and M. Y. Khuhawar, "Total phenols as pollution indicator of sewage and sewage contaminated canal," *Journal of the Chemical Society of Pakistan*, vol. 25, pp. 206–209, September 2003.
- [218] G. M. Arain, A. J. Laghari, and M. Y. Khuhawar, "Spectrophotometric analysis of cis-platin injection and lead containing cosmetics using 2-acetylpyridine-4-phenyl-3-thiosemicarbazone as complexing reagent," in *Proceedings of 7th National Symposium on Analytical and Environmental Chemistry*, vol. 4, pp. 8–10, June 2003.
- [219] V. K. Dewani, I. A. Ansari, and M. Y. Khuhawar, "Profile of metal contents of sewage contaminated canal fishes," *Journal of the Chemical Society of Pakistan*, vol. 25, pp. 37–41, March 2003.
- [220] S. M. Leghari, M. A. Mahar, T. M. Jahangir, A. D. Rajper, and M. Y. Khuhawar, "Physico-chemical and biological study of rain water pools, lonikot, thana bola khan and kohistan region of district dadu, sindh, pakistan," in *Proceedings of Pakistan Congress of Zoology* (D. M. Ahmad and D. A. Shakoori, eds.), vol. 23, pp. 13–24, 2003.
- [221] S. Q. Memon, M. I. Bhangar, and M. Y. Khuhawar, "Metal ion uptake properties of 1-nitroso-2-naphthol loaded xad-16 resin," *The Nucleus*, vol. 40, pp. 119–122, 2003.
- [222] A. D. Rajpar and M. Y. Khuhawar, "Liquid chromatographic determination of glutamine in cerebrospinal fluid using 2-hydroxynaphthaldehyde derivatizing reagent," *Chromatographia*, vol. 58, no. 7-8, pp. 479–482, 2003.
- [223] M. Y. Khuhawar and A. D. Rajper, "Liquid chromatographic determination of gamma-aminobutyric acid in cerebrospinal fluid using 2-hydroxynaphthaldehyde as derivatizing reagent," *Journal of Chromatography B*, vol. 788, pp. 413–418, May 2003.
- [224] V. K. Dewani, I. A. Ansari, and M. Y. Khuhawar, "Effect of residues and chemical oxygen demand in hyderabad city sewage added on the fuleli canal water contents," *Journal of the Chemical Society of Pakistan*, vol. 25, pp. 165–172, June 2003.
- [225] S. M. Leghari, T. M. Jahangir, M. Y. Khuhawar, and A. Leghari, "Assessment of water quality and biological indicators in the feeding and spinal drains of the left bank outfall drain (lbod), sindh, pakistan," in *Proceedings of Pakistan Congress of Zoology* (D. M. Ahmad and D. A. Shakoori, eds.), vol. 23, pp. 223–231, 2003.
- [226] S. M. Leghari, T. M. Jahangir, M. Y. Khuhawar, and A. Leghari, "Water quality and biological assessment of ghazi shah and kai springs of district dadu, sindh, pakistan," *Online Journal of Biological Science*, vol. 2, no. 1, pp. 39–42, 2002.
- [227] S. M. Leghari, T. M. Jahangir, M. Y. Khuhawar, and A. Leghari, "Study on the natural springs at clifton, karachi, sindh, pakistan," in *Proceedings of Pakistan Congress of Zoology* (D. M. Ahmad and D. A. Shakoori, eds.), vol. 22, pp. 125–131, 2002.
- [228] G. M. Arain, G. Q. Khaskheli, and M. Y. Khuhawar, "Spectrophotometric and spectrofluorimetric determination of copper(ii), nickel(ii) and platinum(ii) as bis(2-hydroxynaphthaldehyde)ethylenediimine derivative," in *Proceedings of 3rd International and 13th National Chemistry Conference* (D. I. I. Naqvi, ed.), pp. 28–31, 2002.
- [229] V. K. Dewani, I. A. Ansari, and M. Y. Khuhawar, "Quantitative assessment of nitrogen and phosphorus contents in hyderabad city sewage and fuleli canal water," *Pakistan Journal of Scientific and Industrial Research*, vol. 45, pp. 371–374, September-October 2002.
- [230] S. M. Leghari, T. M. Jahangir, M. Y. Khuhawar, and A. Leghari, "Physico-chemical and biological study of ali murad barijo and karogar springs of thana bula khan, district dadu, sindh, pakistan," *Online Journal of Biological Science*, vol. 2, no. 1, pp. 35–38, 2002.

- [231] M. Y. Khuhawar and F. M. A. Rind, "Liquid chromatographic determination of isoniazid, pyrazinamide and rifampicin from pharmaceutical preparations and blood," *Journal of Chromatography B*, vol. 766, pp. 357–363, January 2002.
- [232] S. A. Memon, M. Y. Khuhawar, and F. M. A. Rind, "Indirect determination of vitamin k3 using 2,4,6-tris(2'-pyridyl)-s-triazine by spectrophotometric and flow injection techniques," *Journal of the Chemical Society of Pakistan*, vol. 24, no. 2, pp. 119–121, 2002.
- [233] M. Y. Khuhawar, A. D. Rajper, and F. M. A. Rind, "High performance liquid chromatographic determination of hydrazine in water using 2-hydroxynaphthaldehyde as a derivatizing reagent," *Pakistan Journal of Scientific and Industrial Research*, vol. 45, pp. 371–374, December 2002.
- [234] M. Y. Khuhawar, A. S. Yazdi, and P. C. Uden, "Gas chromatography of copper (ii), nickel (ii), palladium (ii) and vanadium (iv) using atomic emission detector and beta-ketoamine schiff bases derived from stilbenediamines," *Chromatographia*, vol. 56, pp. 729–732, December 2002.
- [235] M. A. Arain, M. Y. Khuhawar, and M. I. Bhangar, "Gas chromatographic analysis of chloride, bromide, and iodide as trifluoromethylmercury(ii) nitrate derivatives," *Journal of Separation Science*, vol. 25, pp. 462–465, May 2002.
- [236] M. A. Arain, M. Y. Khuhawar, and M. I. Bhangar, "Gas and liquid chromatography of metal chelates of pentamethylene dithiocarbamate," *Journal of Chromatography A*, vol. 973, pp. 235–241, October 2002.
- [237] V. K. Dewani, I. A. Ansari, and M. Y. Khuhawar, "Determination and transport of metal ions in river indus at kotri barrage," *Journal of the Chemical Society of Pakistan*, vol. 24, no. 3, pp. 190–194, 2002.
- [238] M. A. Arain, M. Y. Khuhawar, and M. I. Bhangar, "Capillary gas chromatography of metal chelates of diethyl dithiocarbamates," *Chromatographia*, vol. 55, pp. 349–352, March 2002.
- [239] S. M. Mahesar, M. Y. Khuhawar, and M. U. Dahot, "Variation profile of urea and uric acid in normal and psoriatic subjects," *Medical Channel*, vol. 7, pp. 21–30, July-September 2001.
- [240] M. Y. Khuhawar and S. N. Lanjwani, "Solvent extraction and hplc determination of copper, iron nickel and mercury in water and fishes as 2-pyrrolaldehyde-4-phenyl-3-thiosemi-carbazone as derivatizing reagent," *Journal of the Chemical Society of Pakistan*, vol. 23, pp. 157–162, September 2001.
- [241] M. Y. Khuhawar and G. A. Qureshi, "Polyamines as cancer markers: Applicable separation methods," *Journal of Chromatography B: Biomedical Sciences and Applications*, vol. 764, pp. 385–407, November 2001.  
Anticancer and antiviral agents (Therapy monitoring and diagnostic markers).
- [242] T. M. Jahangir, M. Y. Khuhawar, S. M. Leghari, and A. Leghari, "Physico-chemical and biological study of mangho pir eothermal springs karachi, sindh pakistan," *Online Journal of Biological Science*, vol. 1, no. 7, pp. 636–639, 2001.
- [243] S. M. Leghari, T. M. Jahangir, M. Y. Khuhawar, and A. Leghari, "Physico-chemical and biological study of dhabeji springs. malir, karachi, sindh, pakistan," *Online Journal of Biological Science*, vol. 1, no. 7, pp. 623–627, 2001.
- [244] S. M. Leghari, T. M. Jahangir, M. Y. Khuhawar, and A. Leghari, "Physico-chemical and biological studies of eothermal sulphur and chliarothermal springs of lakhi shah saddar (district dadu) sindh, pakistan," *Online Journal of Biological Science*, vol. 1, no. 10, pp. 929–934, 2001.
- [245] M. Y. Khuhawar, T. M. Jahangir, A. Leghari, S. Chandio, and S. Leghari, "Influence of southern sewage treatment plant on the waste water quality of sourthern part of hyderabad city," *The Nucleus*, vol. 38, pp. 165–170, 2001.
- [246] M. Y. Khuhawar, T. M. Jahangir, and F. M. A. Rind, "Indirect determination of mefenamic acid by atomic absorption spectrometry," *Journal of the Chemical Society of Pakistan*, vol. 23, pp. 226–228, December 2001.
- [247] S. A. Memon, M. Y. Khuhawar, and F. M. A. Rind, "Indirect determination of isoniazid using spectrophotometric and flow injection analysis techniques," *The Nucleus*, vol. 38, pp. 273–276, 2001.
- [248] M. Y. Khuhawar and F. M. A. Rind, "Hplc determination of tranexamic acid in pharmaceutical preparations and blood," *Chromatographia*, vol. 53, pp. 709–711, June 2001.
- [249] F. M. A. Rind, M. Y. Khuhawar, and A. D. Rajper, "Hplc determination of phenylpropanolamine in pharmaceutical preparations using 4-dimethylaminobenzaldehyde as a derivatizing reagent," *Journal of Pharmaceutical and Biomedical Analysis*, vol. 26, pp. 331–336, September 2001.
- [250] A. D. Rajper and M. Y. Khuhawar, "Determination of sodium, potassium, calcium, magnesium, iron, copper, zinc and mercury in contaminated wheat and wheat flour," *Pakistan Journal of Analytical and Environmental Chemistry*, vol. 2, pp. 63–65, June 2001.
- [251] M. Y. Khuhawar and S. N. Lanjwani, "Determination of mercury by liquid chromatography of fresh water fishes using 2-thiophenaldehyde-4-phenyl-3-thiosemicarbazone," *Pakistan Journal of Scientific and Industrial Research*, vol. 44, pp. 253–256, October 2001.
- [252] M. Y. Khuhawar, S. M. Leghari, R. B. Bozdar, G. M. Mastoi, and T. M. Jahangir, "Variation in water quality assessment from kotri barrage to arabian sea," in *In Proceedings Vol.II and Recommendations, National Seminar on Drainage in Pakistan, Institute of Irrigation and Drainage Engineering, Mehran University of Engineering and Technology, Jamshoro, Sindh*, pp. 211–214, August 2000.

- [253] M. Y. Khuhawar, A. H. Channar, and S. W. Shah, "Thermoanalytical studies of some schiff base polymers and their metal chelates," *Journal of the Chemical Society of Pakistan*, vol. 22, pp. 14–17, March 2000.
- [254] M. A. Mahar, S. I. H. Jafri, S. M. Laghari, and M. Y. Khuhawar, "Studies on water chemistry and fish production of manchar lake, dadu, sindh (pakistan)," *Pakistan Journal of Biological Sciences (PJBS)*, vol. 3, no. 12, pp. 2151–2153, 2000.
- [255] M. A. Mahar, S. I. H. Jafri, S. M. Leghari, M. Y. Khuhawar, and A. A. Noor, "Studies on the fresh water poisonous planktonic cyanobacteria (blue green algae) of manchar lake, dadu, sindh, pakistan," *Pakistan Journal of Biological Sciences (PJBS)*, vol. 3, no. 11, pp. 1973–1975, 2000.
- [256] F. M. A. Rind and M. Y. Khuhawar, "Spectrophotometric determination of phenylpropanolamine in dosage forms using dimethylaminobenzaldehyde as a derivatizing reagent," *Pakistan Journal of Analytical and Environmental Chemistry*, vol. 1, pp. 20–24, October 2000.
- [257] T. M. Jahangir, M. Y. Khuhawar, S. M. Leghari, W. A. Baloch, A. A. Leghari, and A. Leghari, "Some studies on water quality and biological life at kinjhar and haleji lakes of district thatta, sindh, pakistan," *Pakistan Journal of Biological Sciences (PJBS)*, vol. 3, no. 11, pp. 1965–1972, 2000.
- [258] S. M. Leghari, S. I. H. Jafri, M. A. Mahar, K. H. Lashari, S. S. Ali, T. M. Jahangir, and M. Y. Khuhawar, "Limnological study of sonharo, mehro pateji and cholari lakes of district badin, sindh, pakistan," *Pakistan Journal of Biological Sciences (PJBS)*, vol. 3, no. 11, pp. 1904–1909, 2000.
- [259] S. M. Leghari, M. K. Leghari, M. Y. Khuhawar, and T. M. Jahangir, "Limnological study of tatta pani hot spring and river punch at tatta pani village district punch, azad kashmir, pakistan," *Scientific Khyber*, vol. 13, no. 1, pp. 73–85, 2000.
- [260] V. K. Dewani, I. A. Ansari, and M. Y. Khuhawar, "Evaluation and transport of nitrogen and phosphorus by river indus at kotri barrage," *Journal of the Chemical Society of Pakistan*, vol. 22, pp. 104–110, June 2000.
- [261] R. B. Mahar, H. M. Memon, and M. Y. Khuhawar, "Effect of lakhra thermal power station (ltps) effluents on the river indus water quality," *Pakistan Journal of Analytical and Environmental Chemistry*, vol. 1, pp. 91–98, October 2000.
- [262] M. Y. Khuhawar, A. A. Memon, and M. I. Bhangar, "Determination of urinary putrescine and cadaverine of cancer patients by gas chromatography," *Journal of the Chemical Society of Pakistan*, vol. 22, pp. 115–118, June 2000.
- [263] A. U. Laghari, S. N. Chandio, M. Y. Khuhawar, and S. M. Leghari, "Chemical investigations of sewage effluents of hyderabad city," *Pakistan Journal of Analytical and Environmental Chemistry*, vol. 1, pp. 14–19, October 2000.
- [264] M. Y. Khuhawar, S. M. Leghari, T. M. Jahangir, A. Leghari, and G. M. Mastoi, "Chemical assessment of water quality of rbod project from shahdakt-mirkhan drains to kotri barrage," in *In Proceedings Vol.II and Recommendations, National Seminar on Drainage in Pakistan, Institute of Irrigation and Drainage Engineering, Mehran University of Engineering and Technology, Jamshoro, Sindh*, pp. 297–300, August 2000.
- [265] M. Y. Khuhawar, A. A. Memon, and M. I. Bhangar, "Capillary gas chromatographic determination of vanadium in rock samples using bis(acetylpyalylmethane) ethylenediimine as complexing agent," *Journal of the Chemical Society of Pakistan*, vol. 22, pp. 267–270, December 2000.
- [266] M. Y. Khuhawar, S. M. Leghari, and A. Leghari, "A brief look at present states of left bank outfall drain project in terms of water quality," in *In Proceedings Vol.II and Recommendations, National Seminar on Drainage in Pakistan, Institute of Irrigation and Drainage Engineering, Mehran University of Engineering and Technology, Jamshoro, Sindh*, pp. 79–82, August 2000.
- [267] M. Y. Khuhawar, A. A. Memon, and M. I. Bhangar, "The gc determination of cisplatin as platinum(ii) from pharmaceutical preparations and blood sample of cancer patients," *Chromatographia*, vol. 49, pp. 249–252, March 1999.
- [268] M. Y. Khuhawar, G. M. Mastoi, T. M. Jahangir, and M. Kumber, "Study on some wetlands of sindh," in *Proceedings on The Impact of Environmental Pollution on Lakes of Sindh, MUET, Jamshoro*, pp. 12–17, 1999.
- [269] M. A. Arain, M. Y. Khuhawar, and M. I. Bhangar, "Liquid chromatographic determination of selenium in vegetables and tea leaves as 2,1,3-benzoseleniazole," *Journal of the Chemical Society of Pakistan*, vol. 21, pp. 137–140, June 1999.
- [270] S. M. Leghari and M. Y. Khuhawar, "Limnological study of chotiari reservoir, district sanghar, sindh, pakistan," in *Proceedings of Impact of Environmental Pollution on Lakes of Sindh, organized by EPA Governmnet of Pakistan and Mehran University of Engineering and Technology Jamshoro, Sindh, Pakistan*, pp. 22–27, November 1999.
- [271] I. A. Ansari, V. K. Dewani, and M. Y. Khuhawar, "Evaluation of metal contents in phulleli canal and hyderabad city sewage by flame atomic absorption spectrophotometer," *Journal of the Chemical Society of Pakistan*, vol. 21, pp. 359–368, December 1999.
- [272] M. Y. Khuhawar, A. A. Memon, P. D. Jaipal, and M. I. Bhangar, "Capillary gas chromatographic determination of putrescine and cadaverine in serum of cancer patients using trifluoroacetylacetone as derivatizing reagent," *Journal of Chromatography B: Biomedical Sciences and Applications*, vol. 723, pp. 17–24, February 1999.

- [273] S. M. Leghari, K. H. Lashari, S. S. Ali, M. A. Mahar, S. I. H. Jafri, M. Y. Khuhawar, and T. M. Jahangir, "Biodiversity of bakar lakes complex (district sanghar) sindh, pakistan," in *Proceedings of Seminar on Aquatic Biodiversity of Pakistan, MRC and Department of Zoology, University of Karachi* (Q. Kazmi and M. Kazmi, eds.), pp. 139–157, 1999.
- [274] M. Y. Khuhawar, A. H. Channar, and S. N. Lanjwani, "Use of malathion for high performance liquid chromatographic determinations of bismuth (iii), copper (ii) and palladium (ii), based on complexation with dimethyl dithiophosphate," *Journal of the Chemical Society of Pakistan*, vol. 20, pp. 257–260, December 1998.
- [275] S. Abbasi, S. W. Shah, M. A. Al-Abbas, M. I. Bhangar, U. M. Abbasi, M. Y. Khuhawar, and V. K. Dewani, "Synthesis and characterization of 1,2-diaminobenzene functionalized xad-2 resin," *ACGC Chemical Research Communications*, vol. 7, pp. 1–7, 1998.
- [276] M. Y. Khuhawar, A. H. Channar, and S. W. Shah, "Syntheses and thermoanalytical studies of some schiff base polymers derived from 5,5'-methylene bis(2-hydroxyacetophenone)," *European Polymer Journal*, vol. 34, no. 1, pp. 133–135, 1998.
- [277] S. M. Leghari, A. Bano, M. Y. Khuhawar, and T. M. Jahangir, "Studies on the fresh water algae of sindh-ii vaucheria species from saline and fresh water riverine ponds of hyderabad sindh, pakistan," *Pakistan Journal of Botany*, vol. 30, no. 1, pp. 15–18, 1998.
- [278] M. Y. Khuhawar, F. M. A. Rind, and K. F. Almani, "Spectrophotometric determination of isoniazid using 6-methyl-2-pyridine carboxaldehyde as a derivatizing reagent," *Journal of the Chemical Society of Pakistan*, vol. 20, pp. 260–263, December 1998.
- [279] M. Y. Khuhawar, A. Sarafraz-Yazdi, J. A. Seeley, and P. C. Uden, "Platinum-selective capillary gas chromatographic determination with microwave-induced plasma atomic emission detection," *Journal of Chromatography A*, vol. 824, no. 2, pp. 223–229, 1998.
- [280] M. Y. Khuhawar and S. N. Lanjwani, "Liquid chromatographic determination of uranium in laki hot springs using bis(salicylaldehyde)propylenediimine as derivatizing reagent," *Journal of the Chemical Society of Pakistan*, vol. 20, pp. 204–208, September 1998.
- [281] M. Y. Khuhawar and S. N. Lanjwani, "Liquid chromatographic determination of cobalt(ii), copper(ii) and iron(ii) using 2-thiophenylaldehyde-4-phenyl-3-thiosemicarbazone as derivatizing reagent," *Talanta*, vol. 46, no. 4, pp. 485–490, 1998.
- [282] M. Y. Khuhawar and S. N. Lanjwani, "High performance liquid chromatographic separation and uv determination of cobalt, copper iron and platinum in pharmaceutical preparations using bis(isovalerylacetone)ethylenediimine as complexing reagent," *Microchimica Acta*, vol. 129, no. 1-2, pp. 65–70, 1998.
- [283] M. Y. Khuhawar and F. M. A. Rind, "High performance liquid chromatographic determination of isoniazid, pyrazinamide and rifampicin in pharmaceutical preparations," *Pakistan Journal of Pharmaceutical Sciences (PJPS)*, vol. 11, pp. 49–54, July 1998.
- [284] S. A. Memon, A. A. Memon, M. I. Bhangar, and M. Y. Khuhawar, "Thermodynamic study of tetradentate keto-amine nickel(ii) complexes as stationary phase for gas chromatography," *Journal of the Chemical Society of Pakistan*, vol. 19, pp. 296–300, December 1997.
- [285] M. Y. Khuhawar and P. Das, "Spectrophotometric determination of nickel in nickel-aluminium alloy and palladium in palladium-barium sulphate using 6-methyl-2-pyridinecarboxaldehyde-4-phenylsemicarbazone as a complexing reagent," *Journal of the Chemical Society of Pakistan*, vol. 19, pp. 108–112, June 1997.
- [286] G. M. Mastoi, M. Y. Khuhawar, and R. B. Bozdar, "Some studies on jamshoro and lakhra stations liquid effluents," in *Proceedings of Environmental Pollution: Third National Symposium on Modern Trends in Contemporary Chemistry* (J. Hanif and M. Hanif, eds.), (Islamabad, Pakistan), pp. 61–63, February 24-26 1997.
- [287] M. Y. Khuhawar, A. H. Channar, and S. N. Lanjwani, "Reverse phase liquid chromatographic separation and determination of bismuth(iii), copper(ii) and palladium(ii) using dimethyl dithiophosphoric acid as complexing reagent," *Journal of the Chemical Society of Pakistan*, vol. 19, pp. 135–137, June 1997.
- [288] V. K. Dewani, I. A. Ansari, and M. Y. Khuhawar, "Pre-concentration and determination of metal ions in phulleli canal and sewage water," in *Proceedings of Environmental Pollution: Third National Symposium on Modern Trends in Contemporary Chemistry* (J. Hanif and M. Hanif, eds.), (Islamabad, Pakistan), pp. 21–24, February 24-26 1997.
- [289] G. M. Mastoi, M. Y. Khuhawar, and R. B. Bozdar, "Physico-chemical analysis of industrial effluents from kotri site area," in *Proceedings of Environmental Pollution: Third National Symposium on Modern Trends in Contemporary Chemistry (NSMTCC)* (J. Hanif and M. Hanif, eds.), (Islamabad, Pakistan), pp. 101–105, February 24-26 1997.
- [290] M. A. Arain, M. Y. Khuhawar, and M. I. Bhangar, "Liquid chromatographic determination of chloride, bromide and iodide using trifluoromethylmercuric nitrate as derivatizing reagent," *ACGC Chemical Research Communications, Australia*, vol. 6, pp. 33–38, 1997.
- [291] G. M. Mastoi, A. A. Khaskheli, I. A. Ansari, and M. Y. Khuhawar, "Kinetic spectrophotometric determination of silver(i) by the catalytic effect on the oxidation of chromotropic acid by bromate," *Journal of the Chemical Society of Pakistan*, vol. 19, pp. 273–278, December 1997.
- [292] A. A. Khaskheli, G. M. Mastoi, I. A. Ansari, and M. Y. Khuhawar, "Kinetic measurements of nitrite by bromopyrogallol red," *Journal of the Chemical Society of Pakistan*, vol. 19, pp. 118–121, June 1997.

- [293] V. K. Dewani, I. A. Ansari, and M. Y. Khuhawar, "Influence of water discharge on chemical assessment of water quality of river Indus at Kotri Barrage, Pakistan," *Journal of the Chemical Society of Pakistan*, vol. 19, pp. 267–272, December 1997.
- [294] M. Y. Khuhawar, A. H. Channar, and S. N. Lanjwani, "Indirect liquid chromatographic determination of malathion in formulations, based on the formation of palladium(II)-dimethyldithiosphate complex," *Journal of Chromatography A*, vol. 758, no. 1, pp. 159–162, 1997.
- [295] M. Y. Khuhawar and G. M. Mastoi, "Impact of drainage water on the quality of Manchar and Hamal lakes," in *Proceedings of National Conference on Impact of Drainage on Environment*, pp. 85–88, MUET, Jamshoro, August 10–12 1997.
- [296] M. Y. Khuhawar, S. N. Lanjwani, and S. A. Memon, "High-performance liquid chromatographic determination of cisplatin as platinum(II) in a pharmaceutical preparation and blood samples of cancer patients," *Journal of Chromatography B: Biomedical Sciences and Applications*, vol. 693, no. 1, pp. 175–179, 1997.
- [297] S. M. Leghari, G. N. Sahito, A. H. Memon, M. Y. Khuhawar, and G. M. Mastoi, "Fresh water red algae in water effluents of thermal power house at Jamshoro, Sindh, Pakistan," *Pakistan Journal of Biological Sciences (PJBS)*, vol. 29, no. 1, pp. 151–160, 1997.
- [298] H. Mahesar, F. D. Khand, M. Y. Khuhawar, and M. A. Qureshi, "Content of metals in drinking water of seven districts of Sindh province," *Sindh University Research Journal (Science Series)*, vol. 29, no. 2, pp. 63–66, 1997.
- [299] T. M. Jahangir, M. Y. Khuhawar, and G. M. Mastoi, "Chemical assessment of water quality at Kpod and tidal link of Ibad project," in *Proceed. Symp. Left Bank Outfall Drain Project and its Impacts*, pp. 53–58, MUET, Jamshoro, November 29 1997.
- [300] M. Y. Khuhawar, A. A. Memon, and M. I. Bhangar, "Capillary gas chromatographic determination of vanadium in crude petroleum oil using fluorinated ketoamines as derivatizing reagents," *Journal of Chromatography A*, vol. 766, no. 1–2, pp. 159–164, 1997.
- [301] M. Y. Khuhawar and S. N. Lanjwani, "Simultaneous solvent extraction and high-performance liquid chromatographic determination of uranium, iron, nickel and copper in mineral ore samples and phosphate rock residues using *n,n'*-ethylenebis(salicylaldehyde) as complexing reagent," *Journal of Chromatography A*, vol. 740, pp. 296–301, August 1996.
- [302] M. Y. Khuhawar and S. N. Lanjwani, "Simultaneous high performance liquid chromatographic determination of vanadium, nickel, iron and copper in crude petroleum oils using bis(acetylacetyl)methane ethylenediamine as a complexing reagent," *Talanta*, vol. 43, no. 5, pp. 767–770, 1996.
- [303] M. Y. Khuhawar and G. M. Mastoi, "Preconcentration by solvent extraction and determination by atomic absorption of some trace metal in water samples using 2-acetylpyridine-4-phenyl-4-thiosemicarbazone," *Science International (Lahore)*, vol. 8, pp. 327–328, 1996.
- [304] M. Y. Khuhawar and P. Das, "Preconcentration and determination of copper, cadmium, nickel and zinc in drinking water by atomic absorption and 6-methyl-2-pyridinecarboxaldehyde-4-phenylsemicarbazone as complexing reagent," *Journal of the Chemical Society of Pakistan*, vol. 18, pp. 6–8, March 1996.
- [305] A. A. Khaskheli, G. M. Mastoi, I. A. Ansari, and M. Y. Khuhawar, "Kinetic spectrophotometric determination of nitrite by catalytic reaction of bromopyrogallol red and bromate," *Journal of the Chemical Society of Pakistan*, vol. 18, pp. 205–210, September 1996.
- [306] A. A. Khaskheli, G. M. Mastoi, I. A. Ansari, and M. Y. Khuhawar, "Kinetic fluorimetric determination of vanadium(IV) by catalytic oxidation of chromotropic acid by hydrogen peroxide," *Journal of the Chemical Society of Pakistan*, vol. 18, pp. 110–112, June 1996.
- [307] M. Y. Khuhawar, A. H. Channar, and S. N. Lanjwani, "Indirect liquid chromatographic determination of malathion based on copper(II) dimethyldithiophosphate complex formation," *Chromatographia*, vol. 42, pp. 680–682, June 1996.
- [308] M. Y. Khuhawar, A. H. Channar, S. N. Lanjwani, and K. P. Mahar, "Indirect high performance liquid chromatographic determination of malathion," *Journal of the Chemical Society of Pakistan*, vol. 18, pp. 306–308, December 1996.
- [309] M. Y. Khuhawar, M. B. Rind, and M. A. Qureshi, "High performance liquid chromatographic separation of putrescine and cadaverine using 2-hydroxynaphthaldehyde as derivatizing reagent," *Journal of the Chemical Society of Pakistan*, vol. 18, pp. 281–284, December 1996.
- [310] M. Y. Khuhawar, M. B. Rind, and G. A. Qureshi, "High performance liquid chromatographic determination of putrescine in tomato using 2-hydroxynaphthaldehyde as derivatizing reagents," *Journal of the Chemical Society of Pakistan*, vol. 18, pp. 119–122, June 1996.
- [311] M. Y. Khuhawar, A. A. Memon, and M. I. Bhangar, "Copper(II) chelates of tetradentate beta-ketoamines as mixed stationary phases for gas chromatography," *Journal of the Chemical Society of Pakistan*, vol. 18, pp. 276–281, December 1996.
- [312] M. Y. Khuhawar and A. H. Channar, "Syntheses and characterization of new Schiff base polymers and their copper(II) and nickel(II) chelates," *Journal of Macromolecular Science, Part A*, vol. 32, no. sup4, pp. 523–530, 1995.
- [313] M. Y. Khuhawar and G. M. Mastoi, "Study of some physico-chemical parameters of Manchar lake," *J. Anal. and Env. Chem. (Univ. Peshawar)*, vol. 3, pp. 66–71, 1995.
- [314] R. B. Bozdar, M. A. Babar, and M. Y. Khuhawar, "Some studies of magnetic susceptibilities of nickel(II), Schiff base complexes," *J. Anal. and Env. Chem. (Univ. Peshawar)*, vol. 3, pp. 118–121, 1995.

- [315] M. Y. Khuhawar and A. I. Soomro, "Preparation and spectroscopic studies of copper(ii), nickel(ii), palladium(iii) and oxovanadium(iv) chelates of flourinated schiff bases," *Journal of the Chemical Society of Pakistan*, vol. 17, pp. 90–93, June 1995.
- [316] S. M. Leghari, G. N. Sahito, and M. Y. Khuhawar, "Physico-chemical and floral studies of pokhan and zai springs of hilly area near thano bola khan, dadu, sindh," *Scientific Khyber*, vol. 8, pp. 37–41, 1995.
- [317] M. Y. Khuhawar, A. A. Memon, and M. I. Bhangar, "Nickel(ii) chelates of some tetradentate schiff bases as stationary phases for gas chromatography," *Journal of Chromatography A*, vol. 715, no. 2, pp. 366–371, 1995.
- [318] M. Y. Khuhawar, Z. P. Memon, and S. N. Lanjwani, "Hplc determination of copper(ii), cobalt(ii) and iron(ii) in pharmaceutical preparations using 2-acetylpyridine-4-phenyl-3-thiosemicarbazone derivatizing agent," *Chromatographia*, vol. 41, no. 3-4, pp. 236–237, 1995.
- [319] M. Y. Khuhawar and S. N. Lanjwani, "High-performance liquid chromatographic separation and determination of cobalt(ii), cobalt(iii) and iron(ii) using bis(salicylaldehyde)tetramethylethylenediimine," *Journal of Chromatography A*, vol. 695, no. 1, pp. 132–135, 1995.
- [320] M. Y. Khuhawar, S. N. Lanjwani, and G. Q. Khaskheli, "High-performance liquid chromatographic determination of vanadium in crude petroleum oils using bis(salicylaldehyde)tetramethylethylenediimine," *Journal of Chromatography A*, vol. 689, no. 1, pp. 39–43, 1995.
- [321] M. Y. Khuhawar and S. N. Lanjwani, "High-performance liquid chromatographic determination of uranium using solvent extraction and bis(salicylaldehyde) tetramethylethylenediimine as complexing reagent," *Talanta*, vol. 42, no. 12, pp. 1925–1929, 1995.
- [322] M. Y. Khuhawar, S. N. Lanjwani, G. Q. Khaskheli, and F. C. Nachnani, "High performance liquid chromatographic determination of nickel in a nickel aluminum alloy using spectrofluorometric detection," *Journal of the Chemical Society of Pakistan*, vol. 17, pp. 97–99, June 1995.
- [323] M. Y. Khuhawar, S. N. Lanjwani, and G. Q. Khaskheli, "Fluorimetric determination of copper in copper wires using bis(salicylaldehyde)tetramethylethylenediamine as complexing reagent," *Journal of the Chemical Society of Pakistan*, vol. 17, pp. 28–30, March 1995.
- [324] S. A. Memon, G. Q. Khaskheli, and M. Y. Khuhawar, "Determination of sulphide in lakhi hot springs using flow injection analysis with spectrophotometric detection and 2,3,5,6-tetrakis(2' pyridylpyrazine reagent)," *J. Anal. and Env. Chem. (Univ. Peshawar)*, vol. 3, pp. 22–24, 1995.
- [325] M. Y. Khuhawar, A. Sarfraz-Yazdi, Y. Zeng, and P. C. Uden, "Capillary gas chromatographic determination of palladium using microwave induced plasma atomic emission detection," *Chern.Anal. (Warsaw)*, vol. 40, pp. 271–279, 1995.  
Editor: Adam Hulanicki (Chemia Analityczna).
- [326] V. K. Dewani, I. A. Ansari, and M. Y. Khuhawar, "Variation of chemical oxygen demand and residue in fulleli canal: Impact of sewerage and industrial effluents," *Scint. Sindh An. J. Res.*, vol. 2, p. 45, 1994.
- [327] M. Y. Khuhawar, M. B. Rind, A. K. Talpur, and A. G. Bhatti, "Spectroscopic studies of some tridentate schiff bases and their metal chelates," *Journal of the Chemical Society of Pakistan*, vol. 16, pp. 240–242, December 1994.
- [328] S. M. Baig, M. Y. Khuhawar, and G. A. Qureshi, "Quantitation of intracellular tryptophan and its metabolites 5-hydroxyindole-3-acetic acid in uremic patients," *Journal of the Chemical Society of Pakistan*, vol. 16, pp. 243–248, December 1994.
- [329] A. R. Samo, S. A. Arbani, M. A. Chippa, M. Y. Khuhawar, and G. A. Qureshi, "Micellar phase transfer catalysis: A suitable procedure to derivatize carboxylic acids in biological matrices," *Journal of the Chemical Society of Pakistan*, vol. 16, pp. 108–111, June 1994.
- [330] M. Y. Khuhawar, A. H. Chanar, and I. A. Qazi, "Indirect determination of malathion using atomic absorption," *Journal of the Chemical Society of Pakistan*, vol. 16, pp. 194–195, September 1994.
- [331] G. A. Qureshi, M. A. Chippa, A. R. Samo, M. Y. Khuhawar, and S. A. Arbani, "Analysis of doping substances by gas chromatography with mass selectivity detector," *Journal of the Chemical Society of Pakistan*, vol. 16, pp. 186–189, September 1994.
- [332] A. R. Samo, S. A. Arbani, M. Y. Khuhawar, M. A. Chippa, and G. A. Qureshi, "The simultaneous analysis of theophylline, caffeine and their metabolites in human plasma by hplc," *Journal of the Chemical Society of Pakistan*, vol. 15, pp. 182–186, September 1993.
- [333] M. Y. Khuhawar, G. Q. Khaskheli, A. K. Talpur, Z. P. Memon, and R. B. Bozdar, "Spectroscopic studies of some uranyl complexes of tetradentate schiff bases," *Journal of the Chemical Society of Pakistan*, vol. 15, pp. 119–122, June 1993.
- [334] Z. Tanwari and M. Y. Khuhawar, "Spectrophotometric studies of copper(ii), nickel(ii) and palladium(ii) complexes of bis(benzoylacetone)meso-stilbene diimine (ba2s) using solvent extraction technique," *Journal of the Chemical Society of Pakistan*, vol. 15, pp. 237–240, December 1993.
- [335] A. R. Samo, M. Y. Khuhawar, S. A. Arbani, and G. A. Qureshi, "Quantitation of azide and lead in lead azide by voltammetric method," *Journal of the Chemical Society of Pakistan*, vol. 15, pp. 187–190, September 1993.
- [336] M. Y. Khuhawar, M. A. Babar, and R. B. Bozdar, "Magnetic susceptibilities of copper(ii) complexes of tetradentate schiff bases," *Journal of the Chemical Society of Pakistan*, vol. 15, pp. 240–243, December 1993.

- [337] A. R. Samo, M. Y. Khuhawar, M. A. Chippa, S. A. Arbani, and G. A. Qureshi, "Improvement in the electrostatic theory of reversed-phase ion-pair chromatography to include the role of organic modifier," *Journal of the Chemical Society of Pakistan*, vol. 15, pp. 196–199, September 1993.
- [338] M. Y. Khuhawar, S. N. Lanjwani, and G. Q. Khaskheli, "High performance liquid chromatographic determination of vanadium in crude oils and cobalt and iron in pharmaceutical preparations," in *Proceedings of Fifth National Chemistry Conference*, (Quaid-e-Azam University, Islamabad), p. 35, October 25-28 1993.
- [339] M. Y. Khuhawar, M. B. Rind, and M. A. Qureshi, "High performance liquid chromatographic determination of biological active diamines using 2-hydroxynaphthaldehyde as derivatizing reagent," in *Proceedings of Second National Biochemistry Symposium* (F. K. M.U. Dahot, ed.), (Institute of Chemistry, University of Sindh, Jamshoro), pp. 40–46, February 20-22 1993.
- [340] M. Y. Khuhawar and A. I. Soomro, "Gas and liquid chromatographic studies of copper(ii), nickel(ii), palladium(ii) and oxovanadium(iv) chelates of some fluorinated ketoamine schiff bases," *Journal of Chromatography A*, vol. 639, no. 2, pp. 371–374, 1993.
- [341] M. Y. Khuhawar, A. Sarafraz-Yazdi, and P. C. Uden, "Capillary gas chromatographic determination of copper and nickel using microwave-induced plasma atomic emission detection," *Journal of Chromatography A*, vol. 636, no. 2, pp. 271–276, 1993.
- [342] M. Y. Khuhawar and A. G. Bhatti, "Preparation, characterisation and chromatographic studies of copper(ii), nickel(ii) and oxovanadium(iv) complexes of new tetradentate ketoamine schiff bases," *Journal of the Chemical Society of Pakistan*, vol. 14, pp. 191–200, September 1992.
- [343] M. Y. Khuhawar and A. G. Bhatti, "Preparation and some studies of copper(ii) and nickel(ii) complexes of new tetradentate schiff bases derived from beta-diaminopentane," *Journal of the Chemical Society of Pakistan*, vol. 14, pp. 14–19, March 1992.
- [344] M. Y. Khuhawar and A. I. Soomro, "Liquid and gas chromatographic procedures for the simultaneous determination of copper, nickel and palladium using tetradentate schiff bases as complexing agents," *Analytica Chimica Acta*, vol. 268, no. 1, pp. 49–53, 1992.
- [345] M. Y. Khuhawar, R. B. Bozdar, and M. A. Babar, "High-performance liquid chromatographic determination of selenium in coal after derivatization to 2,1,3-benzoselenadiazoles," *Analyst*, vol. 117, no. 11, pp. 1725–1727, 1992.
- [346] M. Y. Khuhawar and A. I. Soomro, "High performance liquid chromatographic separation of copper(ii), nickel(ii), palladium(ii) and oxovanadium(iv) complexes of tetradentate schiff bases derived from stilbenediamines," *Journal of the Chemical Society of Pakistan*, vol. 14, pp. 206–212, September 1992.
- [347] M. Y. Khuhawar and A. I. Soomro, "High performance liquid chromatographic determination of copper(ii), nickel(ii), palladium (ii), and platinum(ii) using solvent extraction and bis(isovalerylacetone)ethylenediimine as complexing reagent," *Journal of Liquid Chromatography*, vol. 15, no. 4, pp. 647–656, 1992.
- [348] M. Y. Khuhawar and A. I. Soomro, "High performance liquid chromatographic determination of copper(ii) and nickel(ii) by using solvent extraction and bis(acetylpyvalylmethane)ethylenediimine as complexing reagent," *Talanta*, vol. 39, no. 6, pp. 609–612, 1992.
- [349] A. Sarafraz-Yazdi, M. Y. Khuhawar, and P. C. Uden, "Gas chromatography of chloride and bromide as phenylboronic acid/mercuric nitrate derivatives with microwave induced plasma atomic emission detection," *Journal of Chromatography A*, vol. 594, no. 1-2, pp. 395–399, 1992.
- [350] Y. Zeng, J. A. Seeley, T. M. Dowling, P. C. Uden, and M. Y. Khuhawar, "Element-selective atomic emission detection for capillary gc of metal-containing compounds," *Journal of High Resolution Chromatography*, vol. 15, no. 10, pp. 669–676, 1992.
- [351] Y. Zeng, J. A. Seeley, T. M. Dowling, M. Y. Khuhawar, and P. C. Uden, "Element selective detection for capillary gas chromatography of metal containing compounds recipe development for gc-aed," in *Proceedings of the 14th International Symposium on Capillary Chromatography* (f. D. P. Sandra, M.E. Lee and G. Devos, eds.), (Baltimore, Maryland, USA), p. 728, May 25-29 1992.
- [352] M. Y. Khuhawar and A. G. Bhatti, "Chromatographic studies of oxovanadium(iv), palladium(ii), copper(ii) and nickel(ii) chelates of some fluorinated tetradentate schiff bases," *Journal of the Chemical Society of Pakistan*, vol. 14, pp. 244–248, December 1992.
- [353] M. Y. Khuhawar and A. K. Talpur, "Chromatographic separations of copper(ii), nickel(ii) and palladium(ii) chelates of tetradentate schiff bases derived from 5-methylhexane-2,4-dione and 1.1.1-trifluoro-5-methylhexane-2,4-dione," *Journal of the Chemical Society of Pakistan*, vol. 14, pp. 102–108, June 1992.
- [354] F. Khand, M. Y. Khuhawar, S. Memon, and A. F. Ansari, "Use of infrared spectroscopy for the identification of urinary tract calculi," *Journal of the Chemical Society of Pakistan*, vol. 13, pp. 19–24, March 1991.
- [355] M. Y. Khuhawar and A. G. Bhatti, "Thermoanalytical and chromatographic studies of copper(ii), nickel(ii) and oxovanadium(iv) complexes of tetradentate schiff bases derived from beta-diketones and 2,3-diaminopentane," *Journal of Chromatography A*, vol. 558, pp. 187–195, September 1991.
- [356] M. Y. Khuhawar and G. Q. Khaskheli, "Glc and hplc studies of copper(ii), nickel(ii), palladium(ii) and vanadium(iv) complexes of bis(salicylaldehyde)tetramethylethylenediimine," *Journal of the Chemical Society of Pakistan*, vol. 13, pp. 10–15, March 1991.

- [357] M. Y. Khuhawar and R. B. Bozdar, "Gas chromatographic studies of palladium(ii) and vanadium(iv) oxide complexes of meso-and dl-bis(acetylaceton)stilbenediimine and meso-and dl-bis(trifluoroacetylaceton)stilbenediimine," *Journal of the Chemical Society of Pakistan*, vol. 13, pp. 28–31, March 1991.
- [358] M. Y. Khuhawar and R. B. Bozdar, "Adsorption hplc separation of copper(ii), nickel(ii), palladium(ii) and oxovanadium(iv) complexes of dl-and meso-bis(acetylaceton)-stilbenediimine and dl-and-meso-bis(trifluoroacetylaceton)-stilbenediimine," *Journal of the Chemical Society of Pakistan*, vol. 13, pp. 197–200, September 1991.
- [359] M. Y. Khuhawar and A. G. Bhatti, "The separation of metal complexes of tetradentate beta-ketoamines by gas chromatography," in *National Symposium on Modern Trends in Contemporary Chemistry*, Pakistan Atomic Energy Commission, Islamabad, March 6-8 1990.
- [360] M. Y. Khuhawar, G. Q. Khaskheli, and A. K. Talpur, "The separation of copper(ii), nickel(ii) and palladium(ii) complexes of new tetradentate schiff bases using normal phase hplc," *Journal of the Chemical Society of Pakistan*, vol. 12, pp. 34–40, March 1990.
- [361] M. Y. Khuhawar and G. Q. Khaskheli, "Some new chromogenic reagents for copper (i) and iron(ii); pyridyl-substituted pyrazine and quinoxaline compounds," *Journal of the Chemical Society of Pakistan*, vol. 12, pp. 52–61, March 1990.
- [362] M. Y. Khuhawar and W. I. Stephen, "Some new assymetrical pyridyl-substituted pyrazine and quinoxaline ligands for copper and iron," *Pakistan Journal of Scientific and Industrial Research*, vol. 33, pp. 77–81, March 1990.
- [363] M. Y. Khuhawar, A. G. M. Vasandani, and A. I. Soomro, "Separation of copper(ii), nickel(ii), palladium(ii) and vanadium(iv) complexes of bis(isovalerylaceton)ethylenediimine using solvent extraction and gas chromatography," *Journal of the Chemical Society of Pakistan*, vol. 12, pp. 119–124, June 1990.
- [364] M. Y. Khuhawar and A. G. Bhatti, "Preparation, characterization and light absorption spectrophotometry of copper(ii) and nickel(ii) complexes of some fluorinated tetradentate ketoamine schiff bases," *Journal of the Chemical Society of Pakistan*, vol. 12, pp. 1–7, March 1990.
- [365] M. Y. Khuhawar, A. I. Soomro, and A. G. M. Vasandani, "Preparation and gas chromatographic of copper(ii), nickel(ii), palladium(ii) and vanadium(iv) oxide chelates of dl-and meso-bis(pivaloylaceton)stilbenediimine," *Journal of the Chemical Society of Pakistan*, vol. 12, pp. 201–206, September 1990.
- [366] M. Y. Khuhawar and A. G. Bhatti, "Hplc separation of copper(ii), nickel(ii) and vanadium(iv) oxide complexes of tetradentate ligands derived from salicylaldehyde and substituted ethylenediamines," *Journal of the Chemical Society of Pakistan*, vol. 12, pp. 324–330, December 1990.
- [367] M. Y. Khuhawar and A. K. Talpur, "Comparative separation of copper(ii), nickel(ii) and palladium(ii) complexes of bis(acetylaceton)phenylpropylenediimine and bis(trifluoroacetylaceton)phenylpropylenediimine on gas chromatography and absorption liquid chromatography," *Journal of the Chemical Society of Pakistan*, vol. 12, pp. 236–242, September 1990.
- [368] M. Y. Khuhawar and A. G. Bhatti, "Thermogravimetry and chromatographic elution of copper(ii) and nickel(ii) complexes of some fluorinated ketoamine schiff bases," *Journal of the Chemical Society of Pakistan*, vol. 11, pp. 246–251, September 1989.
- [369] M. Y. Khuhawar and W. I. Stephen, "The effect of methyl substitution on the ferriin and cupriin reactions in pyridyl substituted pyrazines and dihydropyrazines," *Journal of the Chemical Society of Pakistan*, vol. 11, pp. 41–46, March 1989.
- [370] M. Y. Khuhawar and G. Q. Khaskheli, "Some of the trends in the reactions of pyridyl-substituted pyrazine compounds towards copper(i) and iron(ii)," in *National Chemistry Conference*, vol. 1, 1989.
- [371] M. Y. Khuhawar and G. Q. Khaskheli, "Preparation and gas chromatography of copper(ii), nickel(ii) and palladium(ii) complexes of bis (acetylaceton) phenylethylenediimine," *Journal of the Chemical Society of Pakistan*, vol. 11, pp. 163–167, June 1989.
- [372] M. Y. Khuhawar and A. K. Talpur, "Preparation and chromatographic elution of copper(ii) and nickel(ii) complexes of meso and dl-bis(trifluoroisopropanoylaceton)stilbenediimine on glc and absorption hplc," *Pakistan Journal of Scientific and Industrial Research*, vol. 32, pp. 225–229, April 1989.
- [373] R. Belcher, M. Y. Khuhawar, and W. I. Stephen, "New pyridyl-substituted pyrazine ligands as spectrophotometric reagents for copper and iron," *Journal of the Chemical Society of Pakistan*, vol. 11, pp. 185–193, September 1989.
- [374] M. Y. Khuhawar and R. B. Bozdar, "Gas chromatography of selenium dioxide using 2-and 4-stillbazole as derivatising reagents," *Journal of the Chemical Society of Pakistan*, vol. 11, pp. 12–15, March 1989.
- [375] M. Y. Khuhawar and S. A. Memon, "Analytical separation of copper, nickel and cobalt chelates of both meso and dl-bis(o-hydroxyacetophenone)stilbenediimine," *J. Res. Bah. Zak. Univ. Multan*, vol. 2, p. 11, 1989.
- [376] M. Y. Khuhawar and A. G. M. Vasandani, "Ultraviolet and visible absorption spectra of tetradentate schiff bases and their copper and nickel complexes," *Journal of the Chemical Society of Pakistan*, vol. 10, pp. 213–222, June 1988.
- [377] M. Y. Khuhawar, S. A. Memon, and M. I. Bhangar, "Separation of copper(ii), nickel(ii) and palladium(ii) complexes of bis(o-hydroxyacetophenone)ethylenediimine by hplc," *Journal of the Chemical Society of Pakistan*, vol. 10, pp. 67–69, March 1988.



- [378] M. Y. Khuhawar and A. K. Talpur, "Gas chromatographic separation of copper(ii), nickel(ii) and palladium(ii) complexes of meso-and dl-bis(isopropanoylacetone)stilbenediimine," *Journal of the Chemical Society of Pakistan*, vol. 10, pp. 373–380, September 1988.
- [379] M. Y. Khuhawar and G. Q. Khaskheli, "Comparative gas chromatographic elution of copper and nickel complexes of some fluorinated tetradentate ketoamines," *Journal of the Chemical Society of Pakistan*, vol. 10, pp. 229–234, June 1988.
- [380] M. Y. Khuhawar and A. G. M. Vasandani, "Thermogravimetric and gas chromatographic studies of copper(ii) and nickel(ii) chelates of meso and dl-bis(isovalerylacetone)stilbenediimine," *Journal of the Chemical Society of Pakistan*, vol. 9, pp. 319–328, September 1987.
- [381] M. Y. Khuhawar and A. G. Bhatti, "Separation of copper and nickel complexes of meso and dl-bis(salicylaldehyde)-stilbenediimine using solvent extraction and adsorption hplc," *Indian Journal of Chemistry (JJC-A)*, vol. 26A, no. 2, pp. 180–181, 1987.
- [382] M. Y. Khuhawar, Z. Tanwari, and S. A. Memon, "Separation of copper and nickel complexes of bis(benzoylacetone) meso-stilbenediimine using solvent extraction and normal phase hplc," *Journal of the Chemical Society of Pakistan*, vol. 9, pp. 419–422, September 1987.
- [383] M. Y. Khuhawar and Z. P. Memon, "Qualitative studies of reactions of furyl-substituted pyrazine and quinoxaline ligands towards some metal ions," *Pakistan Journal of Scientific and Industrial Research*, vol. 30, no. 5, pp. 338–342, 1987.
- [384] M. Y. Khuhawar and A. G. M. Vasandani, "Preparation, thermogravimetric and gas chromatographic studies of copper(ii) and nickel(ii) complexes of some new ketoamine schiff bases," *Journal of the Chemical Society of Pakistan*, vol. 9, pp. 43–52, March 1987.
- [385] M. Y. Khuhawar and A. G. M. Vasandani, "Dioxouranium (vi) complexes of tetradentate schiff bases derived from beta-diketone and meso-and dl-stilbenediamines," *Journal of the Chemical Society of Pakistan*, vol. 9, pp. 93–99, March 1987.
- [386] M. Y. Khuhawar and W. I. Stephen, "2,6-di(2'-pyridyl)-3,5-di[2'-(6"-methylpyridyl)] pyrazine as a new spectrophotometric reagent for iron (ii)," *Journal of the Chemical Society of Pakistan*, vol. 9, pp. 309–311, June 1987.  
Short Communication.
- [387] M. Y. Khuhawar, "Some thermogravimetric and gas chromatographic studies of meso and dl-bis(acetylacetone)-stilbenediimine," *Arab Gulf Journal for Scientific Research (AGJSR)*, vol. 4, no. 2, pp. 463–472, 1986.
- [388] M. Y. Khuhawar, S. N. Thebow, and S. M. Leghari, "Physico-chemical investigations of hot lakhi springs of sindh, pakistan," *NCE Physical Chemistry*, vol. 5, no. 1, pp. 43–49, 1986.  
University of Peshawar.
- [389] S. M. Leghari, S. N. Arbani, and M. Y. Khuhawar, "A preliminary survey of the algal flora of dhilyer salt lake, district sanghar, sindh, pakistan," *Sindh University Research Journal (Science Series)*, vol. 18, no. 1, pp. 179–184, 1986.
- [390] M. Y. Khuhawar, "Preparation and some gas chromatographic studies of copper(ii) and nickel(ii) complexes of meso and dl-bis(trifluoroacetylacetone)-stilbenediimine," *Journal of the Chemical Society of Pakistan*, vol. 7, pp. 239–248, September 1985.
- [391] M. Y. Khuhawar, Z. P. Memon, A. G. Bhatti, F. C. Nachnani, and S. A. Memon, "Absorption hplc of copper(ii) and nickel(ii) complexes of meso and dl-bis(o-hydroxyacetophenone)-stilbenediimine," *Journal of Pure and Applied Sciences*, vol. 4, p. 35, 1985.  
Islamia University, Bahawalpur.
- [392] M. Y. Khuhawar, A. G. Bhatti, M. A. Qureshi, Z. P. Memon, and F. C. Nachnani, "Some investigations of copper(ii), nickel(ii) and dioxouranium(vi) complexes of bis(salicylaldehyde)meso-stilbenediimine," *Journal of the Chemical Society of Pakistan*, vol. 6, pp. 103–106, June 1984.
- [393] M. Y. Khuhawar, "Copper(ii), nickel(ii) and dioxouranium complexes of new tetradentate schiff base bis(benzoylacetone)meso-stilbenediimine," *Journal of the Chemical Society of Pakistan*, vol. 6, pp. 225–229, December 1984.
- [394] M. Y. Khuhawar and Z. P. Memon, "Qualitative studies of reaction of new organic reagents towards some metal ions," *Journal of the Chemical Society of Pakistan*, vol. 5, pp. 55–59, March 1983.
- [395] M. Y. Khuhawar, "Infrared studies of pyridyl-substituted pyrazine compounds," *Journal of Pure and Applied Sciences*, vol. 2, no. 1, pp. 9–17, 1983.
- [396] M. Y. Khuhawar, R. B. Bozdar, and F. C. Nachnani, "Indirect determination of sulphide and sulphite based on the formation of 2,3,5,6-tetrakis (2-pyridyl)pyrazine iron(ii)-complex," *Journal of the Chemical Society of Pakistan*, vol. 5, pp. 187–189, September 1983.
- [397] M. Y. Khuhawar, R. B. Bozdar, and I. Arain, "Some new pyridyl-substituted pyrazine ligand for copper," *Journal of the Chemical Society of Pakistan*, vol. 4, pp. 137–140, September 1982.
- [398] R. Arain and M. Y. Khuhawar, "Carbon transport in the indus river: Preliminary results," in *SCOPE/UNEP Sonderband: Transport of Carbon and Minerals in Major World Rivers* (E. Degens, ed.), vol. 52, pp. 449–456, University of Hamburg, Hamburg, Germany, 1982.
- [399] M. Y. Khuhawar and W. I. Stephen, "Some new organic reagents for copper and iron," *Pakistan Journal of Scientific and Industrial Research*, vol. 24, no. 2, pp. 49–52, 1981.
- [400] M. Y. Khuhawar, "The adsorption characteristic of ruthenium dipyrityl and ortho-phenanthroline derivatives," *Journal of the Chemical Society of Pakistan*, vol. 2, pp. 87–90, June 1980.