

MALIK SHOAIB AHMAD

HEJ Research Institute of Chemistry University of Karachi, Karachi-75270, Pakistan

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I am currently working at the Dr. Panjwani Center for Molecular Medicine and Drug Research, International Center for Chemical and Biological Sciences, as a Structural Biologist. I have completed postdoc training in Protein Crystallography from the Deutsches Elektronen-Synchrotron (DESY), and University of Hamburg, Germany, under the supervision of Prof. Dr. Christian Betzel

EDUCATION

Postdoc Researcher (Structural Biology/Biomolecular Crystallography)

Jun 2016 to Oct 2017

Institute of Biochemistry and Molecular Biology, University of Hamburg
Laboratory for structural biology of infection and inflammation, DESY, Hamburg, Germany

Ph.D.

Mar 2010 to Jan 2016

HEJ Research Institute of Chemistry University of Karachi, Karachi.

EXPERIENCE

Research Officer (Working as a Structural Biologist)

Nov 2017 to Date

Key irascibilities are research and teaching.

HEJ Research Institute of Chemistry/Dr. Panjwani Center for Molecular Medicine and Drug Research, International Center for Chemical and Biological Sciences (ICCBS), University of Karachi, Pakistan.

Research Officer

Mar 2016 to Jun 2016

Working as a Structural Biologist. Key irascibilities are research and teaching.

HEJ Research Institute of Chemistry/Dr. Panjwani Center for Molecular Medicine and Drug Research, International Center for Chemical and Biological Sciences (ICCBS), University of Karachi, Pakistan.

SKILLS

- Protein Isolation from Natural source, Protein Purification & Molecular Cloning
- Protein Crystallization & Protein-ligand Crystallization
- Data Collection (Home Source & Synchrotron Beamline)
- XRD, (Small Molecules & Biomolecules) SAXS
- Data Processing & Refinement
- Molecular Modeling & Docking
- NMR, CD, ORD, IR, UV, & Mass Spectrometry
- HPLC, FPLC and other Chromatographic techniques
- Structural Elucidation of Natural Products

CONFERENCES

- Poster presented in the 15th SESAME Users Meeting (18–19 Dec 2017) at Gerasa Hotel, Amman, Jordan
- Poster presented in the 43rd International Nathiagali Summer College (16-28 Jul 2018) at National Center for Physics (NCP), Quaid-e-Azam University, Islamabad (**Win 3rd Poster Prize**)
- Poster presented in ASOMPS-XIV, 2013, Karachi, Pakistan

PATENT

Treatment and inhibition of protozoal diseases with nandrolone and its derivatives. United States patent US 9,173,888. 2015 Nov 3.

LIST OF PUBLICATIONS

- 1- **Malik Shoib Ahmad***, Saima Rasheed, Sven Falke, Binish Khaliq, Markus Perbandt, M. Iqbal Choudhary, Wojciech T. Markiewicz, Jan Barciszewski, and Christian Betzel, Crystal structure of mistletoe lectin I (ML-I) from *Viscum album* in Complex with cytosine derivatives at 2.85 Å Resolution, *Medicinal Chemistry*,14(8), 2018, 754-763. ***(Corresponding Author)**.
- 2- Saima Rasheed*, **Malik Shoib Ahmad***, Sven Falke, Arslan Ali, Ramin Fazel, Hartmu Schlüter, Christian Betzel, M. Iqbal Choudhary. Isolation and initial structural characterization of a 27 kDa protein from *Zingiber officinale*, *Journal of Molecular Structures*, 1156, 2018, 330-335, ***(Equal contribution)**.
- 3- **Malik Shoib Ahmad**, Sammer Yousuf, Atia-tul-Wahab, Almas Jabeen, Atta-ur-Rahman, and M. Iqbal Choudhary. Biotransformation of anabolic compound methasterone with *Macrophomina phaseolina*, *Cunninghamella blakesleeana*, and *Fusarium lini*, and TNF- α inhibitory effect of transformed products, *Steroids*, 128, 2017; 75-84.
- 4- **Malik Shoib Ahmad**, Rabia Farooq, Nusrat Hussain, Atia-tul-Wahab, Atta-ur-Rahman, M. Iqbal Choudhary, Three New Analogues of Androgenic Drug Mesterolone through Biotransformation with *Cunninghamella blakesleeana*, *Journal of Molecular Catalysis, B Enzymatic*, 133(S1), 2016; S396-S399.
- 5- **Malik Shoib Ahmad**, Salman Zafar, Sammar Yousuf, Atia-tul-Wahab, Atta-ur-Rahman and M. Iqbal Choudhary. Biotransformation of 6-dehydroprogesterone with *Aspergillus niger* and *Gibberella fujikuroi*. *Steroids*, 112, 2016; 62-67.
- 6- **Malik Shoib Ahmad**, Salman Zafar, Marium Bibi, Saira Bano, Atia-tul-Wahab, Atta-ur-Rahman and M. Iqbal Choudhary. Biotransformation of androgenic steroid mesterolone with *Cunninghamella blakesleeana* and *Macrophomina phaseolina*. *Steroids*, 82, 2014; 53-59.
- 7- Nusrat Hussain, Abdul Hameed, **Malik Shoib Ahmad**, Mujeeb-ur-Rehman, Samar Yousuf, Zulfiqar Ali, M. Hafizur Rahman, and M. Iqbal Choudhary. New iridoids from *Lyonia ovalifolia* and their anti-hyperglycemic effects in mice pancreatic islets, *Fitoterapia*, 131, 2018, 168-173.
- 8- Abdul Wajid, **Malik Shoib Ahmad**, Sammer Yousuf, Atia-tul-Wahab, Almas Jabeen, Atta-ur-Rahman, M. Iqbal Choudhary. Biotransformation of progestonic hormone dydrogesterone with *Macrophomina phaseolina*, and study of the effect of biotransformed products on phagocytes oxidative burst. **(Submitted in Steroids)**.
- 9- Rabia Farooq, Nusrat Hussain, Sammer Yousuf, Atia-tul-Wahab, **Malik Shoib Ahmad**, and M. Iqbal Choudhary, Microbial transformation of mestanolone by *Macrophomina phaseolina* and *Cunninghamella blakesleeana* and anticancer activities of its transformed products, *RSC Advances*, 39(8), 2018: 21985-21992.

- 10- Abdul Wajid, **Malik Shoaib Ahmad**, Sammer Yousuf, Shabana Simjee, Uzair Nisar, Atta-ur-Rahman, and M. Iqbal Choudhary, *Macrophomina phaseolina* mediated intramolecular *trans*-esterification of picrotoxinin and study of its convulsant activity (**Accepted, in Journal of Molecular Structure**)
- 11- Binish Khaliq, Amr Negm, Aisha Munawar, Friedrich Buck, Maria Saqib, Seema Mahmood, Christian Betzel, **Malik Shoaib Ahmad** and Ahmed Akrem. SAXS and other spectroscopic analysis of 12S cruciferin isolated from the seeds of *Brassica nigra*, *Journal of Molecular Structures*, 1137, 2017: 60-66.
- 12- Muhammad Iqbal Choudhary, Mahwish Siddiqui, Atia-tul-Wahab, Sammer Yousuf, Narjis Fatima, **Malik Shoaib Ahmad** and Hani Choudhry. New Selective Anti-Cancer Agents through Microbial Transformation of Anti-cancer Steroid, Drostanolone Enanthate with *Cephalosporium aphidicola* and *Fusarium lini*, *Frontiers in Pharmacology*, 8, 2017, 1-15.
- 13- Mahwish Siddiqui, **Malik Shoaib Ahmad**, Atia-tul-Wahab, Sammer Yousuf, Narjis Fatima, Nimra Naveed Shaikh, Atta-ur-Rahman, and M. Iqbal Choudhary. Biotransformation of a potent anabolic steroid mibolerone with *Cunninghamella blakesleeana*, *C. echinulata*, and *Macrophomina phaseolina* and biological evaluation of its metabolites, *PLOS One*, 12(2), 2017: e0171476.
- 14- Syed Ghulam Musharraf, Qamar-ul-Arfeen, Arslan Ali, Fareeha Siddiqui, **Malik Shoaib Ahmad**, Ghazanfar Sultan, M. Iqbal Choudhary, Atta-ur-Rahman. Fungal metabolites as a source of marker compounds for the control of illicit use of drugs: mesterolone, a case study, *Metablonics*, 13, 2017: 150.
- 15- Nusrat Hussain, Achyut Adhikari, **Malik Shoaib Ahmad**, Atia-tul-Wahab, Meher Ali, and M. Iqbal Choudhary. Two new prenylated flavonoids from the roots of *Berberis thunbergii* DC. *Natural Products Research*, 31(7), 2016; 785-790.
- 16- Elias Baydoun, Atia-tul-Wahab, Nayab Shoaib, **Malik Shoaib Ahmad**, Dina Farran, Colin Smith, Nimra Naveed, M. Iqbal Choudhary. Microbial transformation of contraceptive drug etonogestrel into new metabolites with *Cunninghamella blakesleeana* and *Cunninghamella echinulate*, *Steroids*, 115, 2016; 56-61.
- 17- Elias Baydoun, Atia-tul-Wahab, **Malik Shoaib Ahmad**, Dina Farran, Colin Smith and M. Iqbal Choudhary. Microbial transformation of danazol with *Cunninghamella blakesleeana* and evaluation of anti-cancer activity of transformed products. *Steroids*, 105, 2016; 121-127.
- 18- Colin Smith, Atia-tul-Wahab, Mahwish Shafi Ahmed Khan, **Malik Shoaib Ahmad**, Dina Farran, M. Iqbal Choudhary, and Elias Baydoun. Microbial transformation of oxandrolone with *Macrophomina phaseolina* and *Cunninghamella blakesleeana*. *Steroids*, 102, 2015; 39-45.
- 19- Shafiq-ur-Rahman, Muhammad Ismail, Muhammad Raza Shah, Achyut Adhikari, Itrat Anis, **Malik Shoaib Ahmad**, and Muhammad Khurram. Govanoside A, a new steroidal saponin from rhizome of *Trillium govanianum*. *Steroids*, 104, 2015; 270-275.
- 20- Elias Baydoun, Martin Karam, Atia-tul-Wahab, Mahwish Shafi Ahmed Khan, **Malik Shoaib Ahmad**, Samreen, Colin Smith, Roula Abdel-Massih and M. Iqbal Choudhary. Microbial transformation of Nandrolone with *Cunninghamella echinulata* and *Cunninghamella blakesleeana* and Evaluation of Leishmaniacidal Activity of Transformed Products. *Steroids*, 88, 2014; 95-100.

REFERENCES

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