## MOHAMMAD JAMSHED AHMAD SIDDIQUI

Assistant Professor Department of Pharmaceutical Chemistry Kulliyyah of Pharmacy, International Islamic University Malaysia (IIUM) Indera Mahkota, Kuantan campus-25200 Pahang, Malaysia. Email: jamshed\_siddiqui@iium.edu.my; siddiquijamshed@hotmail.com H/P: +60174473266; WhatsApp: +60179168513



#### POSITION

A researcher and academician by training and can excel both in academics as well as in research with expertise in development of new and inexpensive process technologies and sound knowledge of API's, NCE's and IPR. Proficiency in Medicinal Chemistry, Pharmacognosy, Organic Chemistry and Pharmaceutical Analysis

#### EDUCATION

#### Pharmaceutical Policy and Analysis Summer course Utrecht University Utrecht 2014

PDF	Pharmaceutical Chemistry	U.S.M. Penang, Malaysia	2008-2011
PhD	Chemistry	A.M.U. Aligarh, INDIA	1991
MPhil	Chemistry	A.M.U. Aligarh, INDIA	1987
MSc	Organic Chemistry	A.M.U., Aligarh, INDIA	1985

#### **EXPERTIES**

- Natural Products Chemistry
- Active Pharmaceutical Ingredients
- New Chemical Entities
- Synthetic Chemistry
- Analytical Method development

#### RESEARCH

## Natural Products Chemistry

- Isolation and structure elucidation of active principles from herbal medicinal plants
- Commercialization of high valued low volume Phytochemicals and their precursors used in anticancer drugs. Generate Intellectual Property Rights (IPR).
- Standardization and optimization of crude and fine herbal extracts for their quality, safety and efficacy, Active Pharmaceutical Ingredients

• Prepare new molecules using structure activity relationship (SAR) and to check their efficacy using different anticancer cell lines. Shortlisted molecules were developed at pilot scale level and validated their processes. Active molecules were protected by IPR.

# Synthetic Chemistry

- Non-infringing routes has been developed for synthesis of anticancer drugs
- Lab scale to pilot-plant scale and subsequently Technology transfer to bulk drugs for anticancer generic drugs.
- Technology transfer of non-oncology generic drugs and their intermediates and NCE's.
- One pot synthesis of phenylcoumarins.
- Successful technology transfer to Bulk Drug:
- Cladribine
- Vinorelbine
- Fludarabine
- Gemcitabine

## **Analytical Method Development**

- Quantitative and qualitative determination and method validation of bioactive markers and secondary metabolites on HPLC, LC-MS and HPTLC
- Gravimetric and spectrometry determination of primary metabolites

### TEACHING

- Medicinal Chemistry
- Pharmaceutical Analysis
- Complimentary Medicine
- Organic Chemistry
- Pharmacognosy
- Biopharmacy
- Quality Assurance
- Health Promotion
- Natural Products
- Advanced Medicinal Chemistry
- Problem Based learning

## **RESEARCH GRANTS**

- Principal Investigator- Fingerprinting of *Syzygium companulatum* (kelat paya) leaf extracts utilizing gas chromatography-mass spectrometery (GC-MS) and metabolomics for their quality and efficacy profile **EDWB14-094-0979/2014; RM 20000.00**
- Co-researcher in a under graduate students research grant entitled "Chemical Profiling of Zingiber Officinale Variants to Assess Their Quality and Safety" B Pharm B01/08-Res (19) 2011; RM 30000.00

- Co-researcher in a under graduate students research grant entitled "Chemometric analysis of *Labisia pumila* (Kacip Fatimah) variants by Fourier Transform Infrared (FT-IR) Spectroscopy to assess their quality" **B Pharm B01/09-Res(26) 2012**; **RM 3000.00**
- Co-researcher in a undergraduate students grant entitled "Beliefs and Attitude towards complementary and alternative medicines (CAM) use in elderly Malaysians B Pharm B01/09-Res (35)2012; RM 3000.00
- Co-research in a undergraduate students grant entitled "Use and Perceived Benefits of Mouthwash among Malaysians" B Pharm B01/10-Res(34)2012 RM 2200.00

# • RESEARCH SUPERVISION

- Main supervision of one Masters student at IIUM, Kuantan
- Co supervision of one PhD student at IIUM, Kuantan
- Co supervision of several undergraduate students at IMU, Kuala Lumpur.
- Co supervision of undergraduate students at IIUM, Kuala Lumpur

## EXTRA ACADEMIC AFFAIRS

- Member Indian Pharmaceutical Association
- Examiner M.Pharm Pharmaceutical Analysis II, Jamia Hamdard University, Delhi
- Examiner Ph.D thesis evaluation and conducting Viva -voci examinations on a panel of Jamia Hamdard University, Jamia Hamdard, Delhi.
- Evaluator Six Ph.D thesis of Pharmaceutical Chemistry students of Jamia Hamdard University, Hamdard Nagar, Delhi and taken their Viva voci examinations.
- Evaluator Ph.D. thesis of Pharmaceutical chemistry Karachi University, Karachi, Pakistan.

# EDITORIAL BOARD MEMBER

- Pharmacologia
- International Journal of Research in Agriculture and Food Sciences (IJSK)

## **REVIEWER- REVIEWER OF SEVERAL SCIENTIFIC RESEARCH PAPERS**

- BMC Research note
- Pakistan Journal of Pharmaceutical Sciences
- Journal of Chemical Society of Pakistan
- Pharmazei
- Acta Pharmaceutica, Crotia
- African Journal of Agricultural Research
- Journal of Ethnopharmacology
- Journal of Medicinal Plants Research
- Arabian Journal of Chemistry
- Journal of Pharmacy & Bioallied Sciences
- International Journal of Biochemistry Research & Review

## PRESENT ASSIGNMENTS

International Islamic University Malaysia, Kuantan Malaysia (IIUM) Assistant Professor, Pharmaceutical Chemistry, June' 2012- Till date

## PAST EXPERIENCE

International Medical University, Kuala Lumpur Malaysia (IMU) Senior Lecturer, Pharmaceutical Chemistry, March' 2011- June' 2012

# TEACHING PORTFOLIO

# UNDERGRADUATE TEACHING/POST-GRADUATE TEACHING & RESEARCH

## TEACHING EXPERIENCE AT IIUM JUNE 2012- TILL DATE

- COURSE TITLE: PHM1113 (Islamic input in Pharmacy); SEM :1; YEAR 1 LEVEL: Undergraduate; NUMBER OF LECTURES:3; NUMBER OF STUDENTS:138.
- COURSE TITLE: PHMC 1214 (Organic Chemmistry); SEM :2; YEAR 1; LEVEL: Undergraduate; NUMBER OF LECTURES:8; NUMBER OF STUDENTS:138.
- COURSE TITLE: PHMC 2162 (Pharmaceutical Analysis II); SEM :1; YEAR 2; LEVEL: Undergraduate; NUMBER OF LECTURES:12; NUMBER OF STUDENTS:100; COURSE COORDINATOR
- COURSE TITLE: PHMC 2122 (Fundamental of Medicinal Chemistry); SEM :1; YEAR 2; LEVEL: Undergraduate; NUMBER OF LECTURES:8; NUMBER OF STUDENTS:100.
- COURSE TITLE: PHMC 3263 (Pharmacognosy); SEM :2; YEAR 3; LEVEL: Undergraduate; NUMBER OF LECTURES:6; NUMBER OF STUDENTS:138; COURSE COORDINATOR
- COURSE TITLE: PHM 3012 (Research Project-LS)); SEM :1; YEAR 3; LEVEL: Undergraduate; NUMBER OF LECTURES:Guidance ; NUMBER OF STUDENTS: 98.
- COURSE TITLE: PHM 4112 (Quality Assurance); SEM :1; YEAR 4; LEVEL: Undergraduate; NUMBER OF LECTURES:8; NUMBER OF STUDENTS:100;
- COURSE TITLE: PHM4171 [Problem based learning II (PBL)]; SEM :1; YEAR 4; LEVEL: Undergraduate; NUMBER OF LECTURES: Counseling ; NUMBER OF STUDENTS:100.
- COURSE TITLE: PHMC (Experimental methodology); SEM :1; YEAR 1; LEVEL: Post Graduate; NUMBER OF LECTURES:2; NUMBER OF STUDENTS:30
- COURSE TITLE: AHB1312 (Basic Chemistry), SEM 1, Year 1; Level : Undergraduate; Number of Lectures 28: Number of students: 66

# TEACHING EXPERIENCE AT IMU MARCH 2011-JUNE 2012

- COURSE TITLE: MP301(Biopharmacy); SEM :3; YEAR 2; LEVEL: Undergraduate; NUMBER OF LECTURES:12, Workshop 6hrs; NUMBER OF STUDENTS:112; shared Program with University of Strathclyde
- COURSE TITLE: MP201(Health Promotion); SEM :3; YEAR 2; LEVEL: Undergraduate; NUMBER OF LECTURES:12; Workshop 3hrs; NUMBER OF STUDENTS:112; shared Program with University of Strathclyde
- COURSE TITLE: BPH2012(Natural Products in Medicine); SEM :3; YEAR 2; LEVEL: Undergraduate; NUMBER OF LECTURES:8, Practical 12 hrs, CAL based Project 3hrs;NUMBER OF STUDENTS:140.

- COURSE TITLE: BPH 2012(Complementary Medicine); SEM :5; YEAR 3; LEVEL: Undergraduate; NUMBER OF LECTURES:6, CAL 3hrs, Practicals 12 hrs; NUMBER OF STUDENTS:112.
- COURSE TITLE: BPH 2014 (Pharm Analysis I); SEM :3; YEAR 2; LEVEL: Undergraduate; NUMBER OF PRACTICALS:12 hrs, Workshop HPLC 3hrs:NUMBER OF STUDENTS:140.
- COURSE TITLE: BPH 2025 (Medicinal Chemistry); SEM :4; YEAR 2; LEVEL: Undergraduate; NUMBER OF LECTURES:8; NUMBER OF STUDENTS:140; COURSE COORDINATOR.
- COURSE TITLE: BBS 2231 (Bioanalysis); SEM :3; YEAR 2; LEVEL: Undergraduate; NUMBER OF LECTURES:3, PRACTICALS: 6hrs, WORKSHOP: 3hrs, CAL TEST: 2hrs; NUMBER OF STUDENTS:45 COURSE COORDINATOR.
- COURSE TITLE: BCH 2359 (Synthetic Organic Chemistry); SEM :5; YEAR 3; LEVEL: Undergraduate; NUMBER OF LECTURES:3; PRACTICALS: 15hrs; NUMBER OF STUDENTS:30; COURSE COORDINATOR.
- **C**OURSE TITLE: BCH 2351 (Advanced Medicinal Chemistry); SEM :5; YEAR3; LEVEL: Undergraduate; NUMBER OF LECTURES:12; NUMBER OF STUDENTS:30.
- COURSE TITLE: BCH 2247(Physical Chemistry); SEM :2; YEAR 1; LEVEL: Undergraduate; NUMBER OF LECTURES:8; NUMBER OF STUDENTS: 30; COURSE COORDINATOR.
- **C**OURSE TITLE: BCH (Medicinal Chemistry); SEM :1; YEAR 2; LEVEL: Undergraduate; NUMBER OF LECTURES:8; NUMBER OF STUDENTS:100.
- COURSE TITLE: BCH 2124(Pharamceutical Organic Chemistry II); SEM :2; YEAR 1; LEVEL: Undergraduate; NUMBER OF LECTURES:6; NUMBER OF STUDENTS:30.

# RESEARCH EXPERIENCE AT USM FEB 2008-FEB 2011

- Development and Production on Anti-Cancer Herbal Products: from *Vinca rosea* (kemuning cina) and *Orthosiphon stamineus* (misai kucing): from sourcing to pilot scale production.
- Standardization of Herbal drug using different class of markers and their determination quantitatively and qualitatively using HPLC, HPTLC & LC-MS,
- To perform metabolomics profiling by FT-IR using chemometrics analysis by Principle component analysis.
- To determine the Antioxidant potential of standardized crude extracts.
- To evaluate the safety and efficacy of standardized crude extracts
- To established a laboratory "Centre for Herbal & Standardization (CHEST)" for USM with the financial collaborators Biotropics BHD, Malaysia.
- To assess staff for the preparation of Malaysian Herbal Monograph and standardized crude extracts to be used in preclinical studies.
- To assess and help postgraduate students in day-to-day problems related to research or experiment execution.
- To demonstrate and deliver lecuters on research methodology.
- To collect the experimental data from PG's and make them viable for presentation and to publish the data in ISI or refreed journals.
- To prepare the proposals for research grants.
- Procurement of Chemicals and proper maintenance of Instruments like HPLC etc.
- Calibration of instruments with proper SOP's.
- To make power point presentations and posters for conferences and symposiums.

• Arranging meetings and materials for daily progress of PG students.

## **RESPONSIBILITIES AT DABUR RESEARCH FOUNDATION (DRF) APRIL 1994-FEB 2008**

- Process development of API's at lab scale and validation of process at lab scale and then at pilot plant subsequently transfer the technology to bulk drugs.
- To help RA in making TTD with the help of AD and QA personnel.
- Procurement and indentation of raw materials, and to check with the client for cost effectiveness.
- Selection of commercially viable route for the APIs based on cost effectiveness,
- Safety and adoptability.
- To set specifications for the raw materials, intermediates and finish products (non official) by collaboration with the analytical department.
- Thorough search of patents relating to the APIs, development of non-infringing process patents development of intellectual property.
- Supervision of Scientists and Chemist.

## **EMPLOYMENT HISTORY**

### International Medical University (IMU), Kuala Lumpuer, Malaysia

• March' 2011- June' 2012: Senior Lecturer, Pharmaceutical Chemistry,

#### Universiti Sains Malaysia (USM), Penang Malaysia

• Feb'2008 – Feb'2011: **Post-doctoral Fellow,** Pharmaceutical Chemistry

## Dabur Research Foundation (DRF), Ghaziabad India

• 1994–2008: Research Associate-Manager (Principal Research Scientist ), Chemical Research Lab of Dabur Research Foundation, Sahibabad, Ghaziabad, Uttar Pradesh-201010, India

## Atul Products Ltd, Valsad, India

• 1992-1993: Scientist, Atul Products Ltd. Valsad, Gujarat.

## Southern Herbal Ltd, Bangalore, India

• 1993-1994: Scientist and lab in charge, Southern Herbals Ltd, Bangalore , India

## PROFESSIONAL FELLOWSHIPS

• As a senior research fellow (Department of Science and Technology) under Dr. D.K. Kulshreshtha, Medicinal Chemistry Division, CDRI, Lucknow (U.P.).

• As a junior research fellow and senior research fellow (Central Council for Research in Unani Medicine), Department of Chemistry, A.M.U. Aligarh, India.

#### PERSONAL

- Date of Birth: 09-07-1962
- Marital Status: Married
- Nationality: Indian
- Passport No: K9690243

Expiry: 27-06-2023

#### COMPUTER SKILLS

MS word, Excel, PowerPoint, Chem draw, Sci Finder

## **List of Publications**

1. Shafaei A, Aisha AF, **Siddiqui MJ**, Ismail Z. Analysis of L-citrulline and L-arginine in Ficus deltoidea leaf extracts by reverse phase high performance liquid chromatography. Pharmacognosy Res. 2015;7(1):32-7.

2. Mamat CF, Jamshed SQ, El Syed T, Khan TM, Othman N, Al-Shami AK, et al. The use of psychotropic substances among students: The prevalence, factor association, and abuse. J Pharm Bioallied Sci. 2015;7(3):181-7.

3. **Siddiqui MJA**, Yan YY, Verma R, Jamshed SQ. Role of Complementary and Alternative Medicine (CAM) in Geriatric Care: A Mini Review. Pharmacognosy Reviews. 2014;8(16).

4. **Siddiqui MJ**, Mitha S, Tan CE, Koh M, Babar MG, Rajiah K, et al. Use and perceived benefits of mouthwash among Malaysian adults: An exploratory insight. Research in Social and Administrative Pharmacy. 2014;10(5):e59.

5. Jamshed SQ, Elkalmi R, Rajiah K, Al-Shami AK, Shamsudin SH, et al. Understanding of antibiotic use and resistance among final-year pharmacy and medical students: a pilot study. J Infect Dev Ctries. 2014;8(6):780-5.

6. Mitha S, Nagarajan V, Babar MG, **Siddiqui MJA**, Jamshed SQ. Reasons of using complementary and alternative medicines (CAM) among elderly Malaysians of Kuala Lumpur and Selangor states: An exploratory study. Journal of Young Pharmacists. 2013;5(2):50-3.

7. Jamshed SQ, Elkalmi R, Al-Shami AK, Shamsudin SH, Siddiqui MJA, Aziz MAbA, et al. Understanding of antibiotic use and resistance among final year pharmacy and medical students: A pilot study. Journal of infection in Developing countries (accepted). Journal of infection in Developing countries 2013.

8. Izzati N, Al-Alela O, Elkalmi RM-, **Siddiqui MJ**, Mat-so-ad SZB, Ahmed Qu, et al. Breast Self-Examination (BSE) and Attitude towards Breast Self-Examination (BSE) among Women: A Narrative Review. Journal of Pharmaceutical BioSciences. 2013;2:64-75.

9. Aisha A, Ismail Z, Abu-Salah K, **Siddiqui MJ**, Ghafar G, Abdul Majid AM. Syzygium campanulatum korth methanolic extract inhibits angiogenesis and tumor growth in nude mice. BMC Complementary and Alternative Medicine. **2013**;13(1):168.

10. Mohamed B. Khadeer Ahamed, Abdalrahim F. A. Aisha, Zeyad D. Nassar, **M. Jamshed Siddiqui**, Z. Ismail, S.M.S. Omari, et al. Cat's Whiskers Tea (Orthosiphon Stamineus) Extract Inhibits Growth of Colon Tumor in Nude Mice and Angiogenesis in Endothelial Cells via Suppressing VEGFR Phosphorylation. Nutrition and Cancer 2012 64(1):89-99.

11. **Siddiqui MJ**, Jamshed SQ, Ibrahim MIM, Hassali MA, Babar ZUD, Alkalami R. Do Consumers in Pakistan Understand the Concept of Generic Medicines? A Quantitative Insight. Research in Social and Administrative Pharmacy. 2012;8(6):e16.

12. **Siddiqui MJ**, Ismail Z, Khari NS, Mohamad NN, Jamshed SQ. Heavy Metal Contents in Registered Dietary Supplements in Malaysia: A Pilot Study from the Drug Safety Perspective. Research in Social and Administrative Pharmacy. 2012;8(6):e57-e8.

13. Mohamed EA, **Siddiqui MJ**, Ang L, Sadikun A, Chan S, Tan S, et al. Potent alpha-glucosidase and alphaamylase inhibitory activities of standardized 50% ethanolic extracts and sinensetin from Orthosiphon stamineus Benth as anti-diabetic mechanism. BMC Complementary and Alternative Medicine. 2012;12(1):176.

14. Jamshed SQ, **Siddiqui MJ**, Rajiah K, Azhar I. Counseling of Patients by Pharmacy Attendants in Karachi, Pakistan: A Pilot Study. Research in Social and Administrative Pharmacy. 2012;8(6):e57.

15. Jamshed SQ, Ibrahim MIM, Hassali MA, Babar ZUD, Alkalami R, **Siddiqui MJ**. Do Hospital Pharmacists in Pakistan Understand the Concept of Generic Medicines? A Mixed-Method Approach. Research in Social and Administrative Pharmacy. 2012;8(6):e17.

16. Jamshed SQ, Ibrahim MIM, Hassali MA, Babar ZUD, Alkalami R, **Siddiqui MJ**. Do Community Pharmacists Understand the Concept of Generic Medicines? A Quantitative Insight from Karachi, Pakistan. Research in Social and Administrative Pharmacy. 2012;8(6):e16-e7.

17. **Siddiqui MJA**, Ismail Z. Simultaneous Analysis of Bioactive Markers from Orthosiphon Stamineus Benth Leaves Extracts by Reverse Phase High Performance Liquid Chromatography Tropical Journal of Pharmaceutical Research. 2011 February 2011;10(1):97-103.

18. **Siddiqui MJ**, Saidan N, Ismail Z. Simultaneous determination of secondary metabolites from *Vinca rosea* plant extractives by reverse phase high performance liquid chromatography. Pharmacognosy Magazine. 2011 April 1, 2011;7(26):92-6.

19. Shazia Qasim Jamshed, Muhammad Obaid-ur-Rehman, Mohamed Azmi Hassali, **Mohammad Jamshed Ahmad Siddiqui**, Iqbal Azhar, Saleem F. Do pharmacy students in Pakistan understand the concept of cancer?(abstract). International Journal of Clinical Pharmacy. **2011**;33(4):711.

20. Shahfai A, Farsi E, Ahmad BMK, **Siddiqui MJ**, Attitalla IH, Ismail Z, et al. Evaluation of Toxicological and Standardization Parameters and Phytochemical Investigations of *Ficus deltoidea* Leaves. American Journal of Biochemistry and Molecular Biology **2011**;1(3):237-43.

21. S. Jamshed, L.B. Yean, **M.J.A. Siddiqui**, Babar Z. The pharmacist as a member of healthcare team in Karachi, Pakistan: perception of patients (abstract). International Journal of Pharmacy Practice. **2011**;19(Supplement s2).

22. Beng GT, Mohamad Razak Hamdan, **Mohammad Jamshed Siddiqui**, Mohd Nizam Mordi, Sharif Mahsufi Mansor. A simple and cost effective isolation and purification protocol of mitragynine from Mitragyna speciosa Korth (Ketum) leaves. The Malaysian Journal of Analytical Sciences, Vol 15 No 1 (2011): 54 - 60. **2011**;15(1):54-60.

23. Aishal AFA, Abu-SalahII KM, Nassarl ZD, **Mohammad J. Siddiquil**, IsmailII Z, Majid AMSA. Antitumorigenicity of xanthones-rich extract from Garcinia mangostana fruit rinds on HCT 116 human colorectal carcinoma cells. Brazilian Journal of Pharmacognosy **2011**;21(6):1025-34.

24. Abdulrahim F.A. Aisha, Zeyad D. Nassar, **Mohammad J. Siddiqui**, Khalid M. Abu-Salah, Salman A. Alrokayan, Zhari Ismail, et al. Evaluation of Antiangiogenic, Cytotoxic and Antioxidant Effects of Syzgium aromaticum L. Extracts. Asian Journal of Biological Sciences. **2011**;4(3):282-90.

25. **Siddiqui MJ**, Z. Ismail, Aisha AFA, Majid AMSA. Cytotoxic activity of Catharanthus roseus (Apocynaceae) crude extracts and pure compounds against Human Colorectal Carcinoma Cell Line. International Journal of Pharmacology. **2010**;6(1):43-7.

26. **Siddiqui MJ**, Saidan NH, Ismail Z, M. Nor Jaafar. Monitoring anticancer compounds of Orthosiphon stamineus leaves from perlis herbal farm. Malaysian Journal of Pharmaceutical Sciences. **2010**(Supplement No. 1).

27. **Siddiqui MJ**, Saidan NH, Ismail Z, M. Nor Jaafar. Comparative study of standardised extracts of vinca rosea leaves from perlis herbal farm and wildly collected extracts from balik pulau using anticancer markers on HPLC (Abstract). Malaysian Journal of Pharmaceutical Sciences, **2010**(Supplement No. 1).

28. **Siddiqui MJ**, Saidan NH, Ismail Z. Simultaneous determination of secondary metabolites from C. roseus plant extracts by reverse phase high performance liquid chromatography (HPLC). Malaysian Journal of Pharmaceutical Sciences, **2010**(Supplement No. 1).

29. Nursyazura Binti Khari, Nurul Najwa Mohamad, **Siddiqui MJA**, Ismail Z. Bioactive content analysis of Eurycoma longifolia (Tongkat ali) products and their comparison with unformulated standardised freeze dried extracts (Abstract). Malaysian Journal of Pharmaceutical Sciences. **2010**(Supplement No. 1).

30. Noor Hafizoh Saidan, **Siddiqui MJ**, Ismail Z. Optimisation of accelerated solvent extraction (ASE) for the Orthosiphon stamineus leaves (Abstract). Malaysian Journal of Pharmaceutical Sciences,. **2010**(Supplement No. 1).

31. Noor Hafizoh Saidan, **Siddiqui MJ**, ismail Z. Accelerated solvent extraction (ase) of Orthosiphon stamineus leaves and HPLC analysis of methanol Extracts using rapid separation liquidChromatography (RSLC) (Abstract). Malaysian Journal of Pharmaceutical Sciences. **2010**(Supplement No.1).

32. N. Hafizoh Saidan, **M. Jamshed Siddiqui**, Z. Ismail, A. F. A. Aisha, A. M. S Abdul Majid. Cytotoxic activity of Vinca rosea (apocynaceae) standardised crude extracts and selected isolated compounds against human colon carcinoma cell line (Abstract). Malaysian Journal of Pharmaceutical Sciences, **2010**(Supplement No. 1).

33. Mukherjee Rama, Srivastava Sanjay K., **Siddiqui Mohammad J.A.**, Jaggi Manu, Singh Anu T., inventors; Dabur Research Foundation, Ghaziabad, India, assignee. NOVEL BETULINIC ACID DERIVATIVES A-RING-CONDENSED TO A HETEROCYCLIC GROUP. Europe patent **EP 1 858 910 B1**. **2010**.

34. Ameer OZ, Salman IM, **Siddiqui MJ**, Yam MF, Sriramaneni RN, Sadikun A, et al. Cardiovascular activity of the n-butanol fraction of the methanol extract of Loranthus ferrugineus Roxb. Braz J Med Biol Res. **2010** Feb;43(2):186-94.

35. Ameer OZ, Salman IM, **Siddiqui MJ**, Yam MF, Sriramaneni RN, Mohamed AJ, et al. Pharmacological mechanisms underlying the vascular activities of Loranthus ferrugineus Roxb. in rat thoracic aorta. J Ethnopharmacol. **2010** Jan 8;127(1):19-25.

36. Sunder Ramadoss, Manu Jaggi, **Siddiqui MJA**, Khanna AB, inventors; Dabur research Foundation, Ghaziabad, India, assignee. NOVEL BETULINIC ACID DERIVATIVES, PROCESSES FOR PREPARING SUCH DERIVATIVES AND ITS USE AS CANCER GROWTH INHIBITORS Europe patent **EP1131337 B1**. 2009.

37. **Siddiqui MJ**, Hafizoh S, Ismail Z, Muath H S H, Abdul Majid A M S. Analysis of Total Proteins, Polysaccharides and Glycosaponins contents of Orthosiphon staminues (BENTH.) in spray and freeze methanol: water extract (1:1) extracts and its contribution to cytotoxic and angiogenic activities. Pharmcognosy Research. 2009;1(5):320-6.

38. Omar Z. Ameer, Ibrahim M. Salman, **Mohammad Jamshed A Siddiqui**, Mun Fei Yam, Raghava Naidu Sriramaneni, Amirin Sadikun, et al. Vascular responsiveness to different extracts of macrosolen cochinchinensis in isolated rat aortic rings preparations. International Journal of Pharmacology. 2009;5(3):191-9.

39. Ameer OZ, Salman IM, **Siddiqui MJA**, Yam MF, Sriramaneni RN, Sadikun A, et al. In Vitro Cholinomimetic Effect of Loranthus Ferrugineus in Isolated Guinea Pig Ileum. Journal of Acupuncture and Meridian Studies. 2009;2(4):288-93.

40. Ameer OZ, Salman IM, **Siddiqui MJ**, Yam MF, Sriramaneni RN, Sadikun A, et al. Characterization of the possible mechanisms underlying the hypotensive and spasmogenic effects of Loranthus ferrugineus methanolic extract. Am J Chin Med. 2009;37(5):991-1008.

41. Ameer OZ, Salman IM, **Siddiqui MJ**, Yam MF, Sriramaneni RN, Sadikun A, et al. In vitro cholinomimetic effect of Loranthus ferrugineus in isolated guinea pig ileum. J Acupunct Meridian Stud. 2009 Dec;2(4):288-93.

42. Mukherjee Rama, Srivastava Kumar, **Siddioui MJA**, Jaggi Manu, Singh Anu T, Vardhan Anand, et al., inventors; Dabur Research Foundation, Ghaziabad, India, assignee. Novel Betulinic Acid Derivatives Unites States patent **US 2008/ 0293682 A1**. 2008.

43. Sunder Ramadoss, Manu Jaggi, **Siddiqui MJA**, inventors; Dabur Research Foundation, India, assignee. Use of Betulinic acid and its derviatives for inhibiting cancer growth and a method of monitoring this. India, patent 2801/DEL/1997 A 2007.

44. Shiv Kumar Agarwal, Snjay K. Srivastava, A. Vardhan, **Mohammad Jamshed Siddiqui**, Nidhi Rani, Vivek Kumar, et al. Betulinic acid derivatives: Synthesis and their Cytotoxicity. European Journal of cancer supplements. 2006;4(12):517.

45. Jaggi M, Praveen R, Singh AT, Srivastava S, **Siddiqui MJ**, Singh M, et al. 517 POSTER Preclinical development of novel betulinic acid derivatives as potent anticancer and antiangiogenic agents for systemic administration. European Journal of Cancer Supplements. 2006;4(12):157.

46. Sunder Ramadoss, Manu Jaggi, **Siddiqui MJA**, inventors; Dabur Pharma Ltd,New Delhi, India, assignee. Betulinic acid derivatives for inhibiting cancer growth. Europe patent **EP 0943620B1**. 2005.

47. Sunder Ramadoss, Manu Jaggi, Rajendren P, **Siddiqui MJA**, inventors; Dabur Research Foundation (22, Site IV,, Sahibabad Ghaziabad, 201 010, IN) assignee. Novel Betulinic acid derivatives having antiangiogenic activity, processes for producing such derivatives and their use for treating tumor associated angiogenesis. European patent **EP1218402 B1**. 2004.

48. Mukherjee R, Jaggi M, **Siddiqui MJ**, Srivastava SK, Rajendran P, Vardhan A, et al. Synthesis and cytotoxic activity of 3-O-acyl/3-hydrazine /2-bromo/20,29-dibromo betulinic acid derivatives. Bioorg Med Chem Lett. 2004 Aug 2;14(15):4087-91.

49. Mukherjee R, Jaggi M, Rajendran P, Srivastava SK, **Siddiqui MJA**, Vardhan A, et al. Synthesis of 3-O-acyl/3benzylidene/3-hydrazone/3-hydrazine/17-carboxyacryloyl ester derivatives of betulinic acid as anti-angiogenic agents. Bioorganic & Medicinal Chemistry Letters. 2004;14(12):3169-72.

50. Mukherjee R, Jaggi M, Rajendran P, **Siddiqui MJA**, Srivastava SK, Vardhan A, et al. Betulinic acid and its derivatives as anti-angiogenic agents. Bioorganic & Medicinal Chemistry Letters. 2004;14(9):2181-4.

51. Sunder Ramadoss, Manu Jaggi, **Siddiqui MJA**, Khanna AB, inventors; Dabur Research Foundation, assignee. Betulinic acid derivative for inhibiting cancer growth and process for manufacturing Betulinic acid. United States patent **US 6,670,345 B1**. 2003.

52. Sunder Ramadoss, Manu Jaggi, Rajendran P, **Siddiqui MJA**, inventors; Betulinic acid having Angiogenic activity, processing for producing such derivatives and associated angiogenesis. United States patent **US 6,403,816 B1**. 2002.

53. Sunder Ramadoss, **Siddiqui MJA**, inventors; Dabur Research Foundation, Ghaziabad, India, assignee. Extracting Betulinic acid from *Ziziphus jajuba*. United States patent **US 6,264,998B1**. 2001.

54. Sunder Ramadoss, Manu Jaggi, **Mohammad Jamshed Ahmad Siddiqui**, Achla B Khanna, inventors; Dabur Research Foundation, Ghaziabad, India, assignee. Use of Betulinic acid derivative for inhibitibg cancer growth United States patent **US 6,214,814B1**. 2001.

55. Manu Jaggi, Sundar Romdass, Praveen Rajendre, **Siddiqui MJA**, inventors; Dabur Research Foundation, Ghaziabad, India, assignee. Antiangiogenic activity of Betulinic acid derivatives United Staes patent **US 6,228,850 B1**. 2001.

56. Sunder Ramadoss, Manu Jaggi, **Siddiqui MJA**, inventors; Dabur Research Foundation, Ghaziabad, India, assignee. Use of Betulinic acid and its derviatives for inhibiting cancer growth and a method of monitoring this. United States patent **US 6,048,847**. 2000.

57. Ramadoss Sunder (IN)AMADOSS SI, Jaggi Manu (IN), **Siddiqui M, Jamshed, Ahmed; (IN).**, Khanna Achla Behl (IN), inventors; Dabur Research Foundation, Ghaziabad 201 010 (IN) assignee. NOVEL BETULINIC ACID DERIVATIVES, PROCESSES FOR PREPARING SUCH DERIVATIVES AND ITS USE AS CANCER GROWTH INHIBITORS patent **WO/2000/046235** 2000.

58. **M.J.A. Siddiqui**, S. Qasim, M.T.Aftab. Evaluation of general toxicities and myocardial catecholamines in adriamycin treated rabbits. Hamdard Medicus. 1999;Oct-Dec.

59. **M J.A. Siddiqui**, K.M. Shamsuddin. A one pot synthesis of 4 – phenylcoumarins, . Journal of Chemical Research(S). 1998:392.

60. **M.J.A. Siddiqui**, S.A. Khan, B.A. Dar, K.M. Shamsuddin. A Furocoumarin from Angelica Gluca Edgw, Indian Journal of Chemistry. 1989;28B:96.

## SEMINARS / SYMPOSIUM ATTENDED

- 1. A one pot synthesis of 4 phenylcoumarins, M.J.A. Siddiqui, S.A. Khan, and K.M. Shamsuddin, Seminar on Heterocyclic Chemistry in Nature and Industry, Nagpur University, C-19,000, 22, 1988.
- 2. Flacourtin a new Coumarinolignan, from Flacourtia Sepiaria, M.J.A. Siddiqui, S.A. Khan, J.P. Kintzinger and K.M. Shamsuddin, 17th, IUPAC Int. Sym. Of the Chemistry of Natural Produdts, New Delhi 1990, pp. 166., 1990.
- 3. The Millennium Seminar " Commitment to health and safety," India International Center, Delhi Nov 9th 2000.
- 4. International Seminar on "Protection of India's intellectual wealth in the new Millennium" India International Center, Delhi 2nd & 3rd Dec 2000.
- 5. Workshop on "Breath of claims, support by disclosure and Scope of Protection of Patent" India International Center, Delhi 4th Dec 2000.
- 6. STN workshops on "Introduction to online searching for Chemistry", Ambassador Delhi August 2001.
- 7. IUPAC international conference on Biodiversity and Natural Products: Chemistry and Medical Applications , 26-31 January 2004, NEW DELHI.
- 8. Betulinic acid and its derivatives as Anti-angiogenic Agents

Manu Jaggi1, Praveen Rajendran1, Mohammad J. A. Siddiqui2, Sanjay K. Srivastava3, Anand Vardhan2, Rama Mukherjee and Anand C. Burman

2nd international symposium on Current Trends in Drug Discovery Research 17th-20th Feb.2004 Lucknow (U.P.)

- 9. Second International Symposium on Green/ Sustainable Chemistry 10-13 January, 2006. Betulinic acid derivatives: Synthesis and their Cytotoxicity
- The 7th Annual Florida Heterocyclic Conference March 12-March 15, 2006. Shiv K. Agarwal, Snjay K. Srivastava, A. Vardhan, M.J.SIDDIQUI, Nidhi Rani, Vivek Kumar, Manu Jaggi, Anu T. Singh, Manoj K. Singh, Rama Mukherjee and Anand C. Burman (6, 9-61)Antiangiogenic agents for systemic administration. Abstract European Journal of cancer supplements, Vol.4, Issue 12, Nov.2006, page 517
- 12. M.Jaggi, R.Praveen, A.T. Singh, S.Srivastava, M.Singh, V. Sanna, A. Vardhan, M.J. Siddiqui, S.K.Agarwal and R. Mukherjee
- Determination of bioactive markers from Orthosiphon stamineus extractives by reverse phase high performance liquid chromatography with ultra violet detection Mohammad Jamshed Ahmad Siddiqui and Zhari Ismail International herbal Conference, 26-28th Feb. 2009 at Bangalore, accepted as poster presentation. Ref no SNPS/IHCB-091238
- 14. Simultaneous Analysis of Flavonoids, Diterpene and Triterpenoids from Orthosiphon stamineus Benth. Leaves in Freeze and Spray Dried Methanol: Water (1:1) extracts by HPLC and their Action towards Cytotoxic and Antiangiogenic activities. Siddiqui, M. Jamshed, Ismail, Z., Amin M. Shah and H.S.H. Muath, Bandung International Conference on Medicinal Chemistry 2009 (ICMC 2009). As a Oral presentation Bandung, Indonesia Aug 08-10.
- 15. Analysis of Total Proteins, Polysaccharides, Glycosaponins and Indicative Compounds in Standardized Extracts of Orthosiphon staminues (BENTH.) Leaves for Cytotoxic and Antiangiogenic Activities Noor Hafizah Saidan, I. Zhari, M.J.A. Siddiqui, A.M. Amin Malik Syah, H.S.H. Muath Bandung International Conference on Medicinal Chemistry 2009 (ICMC 2009). As a poster presentation Bandung, Indonesia Aug 08-10.
- 16. Cytotoxic activity of Catharanthus roseus (Apocynaceae) crude extracts and pure compounds against Human Colorectal Carcinoma Cell Line. M. J. Siddiqui, Z. Ismail, A. F. A. Aisha and A.M.S. Abdul Majid The International conference on Pharmacy and advanced Pharmaceutical Sciences, Yogyakarta, Indonesia, October 5-6, 2009.
- 17. Chemical Profiling of Orthosiphon staminues, Benth. leaves extractives used in anticancer activity, Mohammad Jamshed Ahmad Siddiqui and Zhari Ismail MUCH International Scientific conference, Genting Highlands, Malaysia 6th -8th November, 2009.
- 18. Comparative study of standardized extracts of Vinca rosea leaves from Perlis Herbal Farm and wildly collected from Balik Pulau using anticancer markers on HPLC. Mohammad Jamshed Siddiqui, Noor Hafizoh Saidan, Zhari Ismail and M. Nor Jaafar. International Conference on Natural products, Penang, Malaysia 10-12 Dec. 2010.
- 19. Cytotoxic activity of Vinca rosea (Apocynaceae) Standardized Crude Extracts and Selected Isolated Compounds against Human Colon Carcinoma Cell Line. N. Hafizoh Saidan, M. Jamshed Siddiqui, Z. Ismail, A. F. A. Aisha and A.M. Shah International Conference on Natural products, Penang, Malaysia 10-12 Dec. 2010.
- 20. Monitoring Anticancer Compounds of Orthosiphon stamineus leaves from Perlis Herbal Farm, Mohammad Jamshed Siddiqui, Noor Hafizoh Saidan, Zhari Ismail and M. Nor Jaafar, International Conference on Natural products, Penang, Malaysia 10-12 Dec. 2010
- 21. Simultaneous determination of secondary metabolites from C. roseus plant extracts by reverse phase high performance liquid chromatography, Mohammad Jamshed Siddiqui, Zhari Ismail and Noor Hafizoh Saidan

International Conference on Natural products, Penang, Malaysia 10-12 Dec. 2010

22. Bioactive content analysis of Eurycoma longifolia (Tongkat Ali) products and their comparison with unformulated standardized freeze dried extracts.

Nursyazura Binti Khari, Nurul Najwa Mohamad, Mohammad Jamshed Ahmad Siddiqui and Zhari Ismail, International Conference on Natural products, Penang, Malaysia 10-12 Dec. 2010

23. Accelerated solvent extraction (ASE) of Orthosiphon stamineus leaves and HPLC analysis of methanol extracts using Rapid separation liquid Chromatography (RSLC)Nor Hafizoh Saidan, Mohammad Jamshed Siddiqui and Zhari Ismail,

International Conference on Natural products, Penang, Malaysia 10-12 Dec. 2010

- Optimization of accelerated solvent extraction (ASE) for the Orthosiphon stamineus leaves. Nor Hafizoh Saidan, Mohammad Jamshed Siddiqui and Zhari Ismail International Conference on Natural products, Penang, Malaysia 10-12 Dec. 2010
- 25. M J Siddiqui,Z Ismail, M R Hamadan, S Q Jamshed. High Performance Liquid Chromatography (HPLC) Coupled with MicrOTOF-Q Mass Spectroscopic Procedure for Qualitative and Quantitative Determination of Vinca rosea Methanol Extract. In: Proceeding of the Malaysian Pharmaceutical Society Pharmacy Scientific Conference (MPS-PSC) 2011. 21-23 October 2011; Kuala Lumpur, Malaysia. [Poster presentation].
- 26. S Q Jamshed, MIM Ibrahim, MA Hassali, ZD Babur, AA Shafie, M J Siddiqui. The Impact of Didactic Lecture to Imrove the Understanding of Pharmacy Students Towards Generic Medicine. In: Proceeding of the Malaysian Pharmaceutical Society Pharmacy Scientific Conference (MPS-PSC) 2011. 21-23 October 2011; Kuala Lumpur, Malaysia. [Poster presentation].
- 27. S Q Jamshed, MIM Ibrahim, MA Hassali, ZD Babur, AA Shafie, M J Siddiqui. Understanding and Perception of Final Year Pharmacy Students Towards Generic Medicine: A Questionnaire-based Study. In: Proceeding of the Malaysian Pharmaceutical Society Pharmacy Scientific Conference (MPS-PSC) 2011. 21-23 October 2011; Kuala Lumpur, Malaysia. [Poster presentation].
- 28. S Q Jamshed, MIM Ibrahim, MA Hassali, Bee Yean Low, ZD Babur, AA Shafie, M J Siddiqui. Is There any Correlation Between GPs Perception and Attitude Towards Generic Medicine Prescribing in Karachi, Pakistan? In: Proceeding of the Malaysian Pharmaceutical Society Pharmacy Scientific Conference (MPS-PSC) 2011. 21-23 October 2011; Kuala Lumpur, Malaysia. [Poster presentation].
- 29. S Q Jamshed, MIM Ibrahim, MA Hassali, ZD Babur, M J Siddiqui, Fahad Saleem. Understanding of Primary Care Doctors about Essential Drug List (EDL): A Qualitative Study. In: Proceeding of the Malaysian Pharmaceutical Society Pharmacy Scientific Conference (MPS-PSC) 2011. 21-23 October 2011; Kuala Lumpur, Malaysia. [Poster presentation].
- S Q Jamshed, MIM Ibrahim, MA Hassali, ZD Babur, M J Siddiqui. Understanding and Perception of Community Pharmacists Towards Generic Medicine: A Questionnaire-based Study. In: Proceeding of the Malaysian Pharmaceutical Society Pharmacy Scientific Conference (MPS-PSC) 2011. 21-23 October 2011; Kuala Lumpur, Malaysia. [Poster presentation].
- 31. S Q Jamshed, K Rajiah, M S Iqbal, M J Siddiqui, F.Saleem, MA Hassali, I Azhar. The Community Pharmacist as a Member of Healthcare Team in Karachi, Pakistan: Opinion of Patients. In: Proceeding of the Malaysian Pharmaceutical Society Pharmacy Scientific Conference (MPS-PSC) 2011. 21-23 October 2011; Kuala Lumpur, Malaysia. [Poster presentation].
- 32. Mohammad Jamshed Siddiqui, Shazia amshed , Do Pharmacy Practitioners understand the concept of Generic Medicines in Malaysia? An exploratory Insight, Ottawa Conference, 9-13 March' 2012 at Kuala Lumper, Malaysia [Poster presentation].
- 33. S Q Jamshed, M A Hassali, M J Siddiqui, M I M Ibrahim & Z U D Babar, FOCUS GROUP DISCUSSION (FGD) WITH PHARMACY STUDENTS ON GENERIC MEDICINES: AN EXPLORATORY INSIGHT, Ottawa Conference, 9-13 March' 2012 at Kuala Lumper, Malaysia [Poster presentation].
- 34. Manuscript conference organized by UKM at Putrajaya on 17-18th Oct 2011. Participate

- 35. Workshop on challenges & Opportunities in Bioavailability and Bioequivalence Research at IMU on 20 Oct 2011- Participate
- 36. Workshop on practical strategies for conducting Pharmacy Practice Research organized by International Medical University 9th may 2012- Participant
- 37. Scientific meeting of Malaysian Society of Pharmacology & Physiology on 18-20<sup>th</sup> May 2012 at Penang-11800 Malaysia [Poster presentation].
- 38. Emerging Research Trends in Pharmacy organized by Tailors University 7-8<sup>th</sup> June 2012-Participant
- 39. Siddiqui MJA, Ismail Z, Khari NS, Mohamad NN, Jamshed SQ, Heavy Metal Contents in Registered Dietary Supplements in Malaysia: a pilot study from the Drug Safety Perspective, 17<sup>TH</sup> International Social Pharmacy Workshop (ISPW) on 23-26<sup>th</sup> July 2012 at Pukhet, Thailand [Poster Presentation]
- 40. Siddiqui MJA, Jamshed SQ, Do consumers in Pakistan understands the concept of generic medicines: A Qualitative insight, 17<sup>TH</sup> International Social Pharmacy Workshop (ISPW) on 23-26<sup>th</sup> July 2012 at Pukhet, Thailand [Oral Presentation].
- 41. Siddiqui MJA, Shahid Mitha, Michelle Koh Ze Yeing, Tan Ching En, Shazia Qasim Jamshed, Use and perceived benefits of mouthwash among Malaysian adults: An exploratory insight, 18<sup>TH</sup> International Social Pharmacy Workshop (ISPW) on 6<sup>th</sup> August 2014 at Boston, USA (accepted for poster presentation).
- 42. Attended Summer School course Utrecht University, Netherlands: Course Pharmaceutical Policy Analysis 5-11 July 2014.
- 43. Siddiqui MJA et al. Chemometric analysis of Labisia pumila (kacip fatimah) variants by Fourier Transform infrared (FT-IR) spectroscopy, 25<sup>th</sup> FAPA congress 2014 on 9-12th Oct at Kota Kinabalu Sabah Malaysia (Poster).