

## BIO-DATA

**Name** : Dr. Sheeba Shafi  
**Religion** : Islam  
**Work Address** : **Dr. Sheeba Shafi**  
Assistant Professor  
Dept. of Chemistry  
College of Science  
**King Faisal University**  
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### Academic Qualifications :

| <b>Name of Examination</b>   | <b>University</b> | <b>Year</b> | <b>Division</b> | <b>Subject</b>  |
|--|-------------------|-------------|-----------------|---|
| <b>Ph.D</b><br>( Organic Chemistry )<br><br>Doctorate thesis has been evaluated and approved by Professor Johan E. Van Lier – Director ,Dept of nuclear medicine & radiobiology ; University of Sherbrooke – Quebec– <a href="#">CANADA –J1H-5N4</a> | AMU, Aligarh      | 2000        |                 | <b><u>Topic of doctorate thesis :</u></b><br><br><a href="#">Synthesis , chemical, biochemical and spectral studies with special reference to X-rays of modified steroids ( Cholesterol derivatives )</a>           |
| <b>M.Sc.</b><br>( Organic Chemistry)<br><br><a href="#">M.Sc with distinctive marks</a>  | AMU, Aligarh      | 1997        | I <sup>st</sup> | <a href="#">Organic chemistry</a><br><a href="#">Inorganic chemistry</a><br><a href="#">Analytical chemistry</a><br><a href="#">Physical chemistry</a><br><a href="#">Biochemistry</a>                              |
| <b>B.Sc ( Hons. )</b><br>Chemistry   | AMU, Aligarh      | 1995        | I <sup>st</sup> | <a href="#">Chemistry</a><br><a href="#">Biochemistry</a><br><a href="#">Physical chemistry</a><br><a href="#">Analytical Chemistry</a><br><a href="#">Organic chemistry</a><br><a href="#">Inorganic chemistry</a> |

**Teaching Experience** : **8+ years**

**Research Experience** : **9+ years**

## **Employment Experience :**

- 1.** Working as a **Assistant Professor** in dept. of chemistry , College of science , **King Faisal University ( KFU ) ; Al-Ahsa w.e.f sept 2012 to date; KSA**
- 2.** Worked as a **Assistant Professor of Chemistry** in dept. of pharmaceutical sciences , College of pharmacy , **King Faisal University ( KFU ) ; Al-Ahsa w.e.f May 2010 to 2012 ; KSA.**
- 3.**  
Worked as a **Lecturer of chemistry** as well as **course director** in dept of general studies , **Jubail University college ( JUC ) ; Royal Commission w.e.f sept. 2006 to April 2010 Al- Jubail ; KSA**
- 4.**  
Worked as **Research Associate in the department of Chemistry, Aligarh Muslim University –Aligarh since july 1997 to june 2000 .**
  - ▶ **During this period , I have been assigned tutorial classes , lab courses of undergraduate and post graduate students .**
  - ▶ **I am engaged in teaching general and organic chemistry and its application as a basis for the student of the medical science to the undergraduate and postgraduate students . I have a thorough understanding of human metabolism , which involves the knowledge at the molecular level.**
  - ▶ **I have also guided M.Sc final year students for seminar lecture and performed invigilation duty during the examination .**
- 5.**  
Worked as **Chemistry teacher in the A.B.K girls section of Aligarh Muslim University ; since july – 2000 to april 2001 ; INDIA**

## **Teaching Engagement at King Faisal University :**

- 1. I am engaged in conducting practicals of organic chemistry in college of science and teaching chemistry in preparatory year students .**
- 2. I am fully engaged in teaching of Pharmaceutical organic chemistry to our first year students .**
- 3. I also taught Medicinal chemistry to the third year students of KFU .**

## **Presented my articles/paper in conference /workshop/ in king Faisal university :**

1. Presented research paper entitled “ Neurotoxicological effects of steroidal compounds in changes of cholesterol level on albino rats on scientific research presentation in feb -2013, organized in female branch, King Faisal university .

2. Delivered the lecture entitled “ Nano taechnology used in the drug discovery and development”.

### **Research Project :**

I have designed and prepared the research project entitled “ Synthesis , Chemical , Biochemical and spectral studies of Photosensitizers conjugated to steroids ”

2. Microwave assisted efficient one pot synthesis of steroidal oxazolines and aziridines of pharmaceutical importance under solvent free condition” KFU Annual Research Grant, 2012-2014, SR 141400/

### **Project with Students :**

1. I have initiated a project with our students entitled “Use of steroids ”

### **Achievements at JUC :**

1. I am completely engaged in the teaching of Chemistry and General chemistry courses to the prep and bachelor students by utilizing all the teaching techniques last three years at JUC .

2. I act as recorder of minutes of all faculty meeting last three years at JUC female branch .

3. Currently, responsible for organizing the remedial classes in all courses for the students at JUC female branch .

4. Acting as a academic advisors last two years .

5. Organized the projects / workshop with the bachelor students in year 2008 -09.

6. Certificate of participation granted by JUC for successfully participating in in “ Professional Development Conference” conducted on July 7, 2009 at JUC female branch .I presented the paper entitled ‘neurotoxicological effect of steroidal compound on different regions of albino rat brain’ .

7. Certificate of appreciation is awarded for presenting a seminar on “ Roles of Chemistry in our daily life ” conducted on May 12 ,2009 .

- 8.** Actively participated in the project day held at JUC female branch in the year 2007-08 .
- 9.** Published article entitled “Chemistry in daily life ”in the SOJOURN magazine of the JUC female branch in the academic year 2008.
- 10.** Communicated articles entitled “Green chemistry” for the SOJOURN at JUC female branch in the academic year 2009.
- 11.** Responsible for organizing the bulletin board of general studies dept in the year 2008-09.

**Academic Position hold at JUC :**

1. Course Director ( chemistry )
2. Lecturer

**Member of the various committees at JUC :**

1. Department Council
2. Member of Quality assurance and accreditation unit
2. Safety Committee

**Summary of Research work :**

- Number of research papers published in refereed journals of national / International reputes → **20**
- Number of research papers presented in International / National conferences → **13**
- Number of research papers published in international / national conference proceeding : → **11**
- Number of research papers communicated in refereed Journals → **09**

**Couses taught at undergarduate and postgraduate level of students :**

**1. General Chemistry :** Its includes the main topics :

1. Chemical foundation
2. Atoms , molecules and ions
3. Stoichiometry

4. Types of chemical reaction and solution stoichiometry
5. Thermochemistry
6. Atomic structure and periodicity
7. Chemical bonding and reactivity
8. Properties of solutions
9. Chemical equilibrium
10. Organic chemistry ( recognize the name and write the structure of all organic compounds includes their stereo chemistry )
11. Chemical reaction

## **2. Pharmaceutical Organic Chemistry**

### **Experimental part :**

- Basic laboratory operation , which includes
- Laboratory safety techniques
- Recognizing the laboratory glass ware and hardwares
- Synthesis of compounds showing their chemical reactions.
- Water analysis
- Volumetric analysis
- Calorimetry
- Molar mass of solid and volatile liquids.

### **2. Physical Sciences : which includes the following topics :**

- Chemistry of elements
- Mixtures
- Chemical bonding - Basic concept
- Types of chemical reaction
- Organic chemistry ( Functional group identification & IUPAC nomenclature )

### **Experimental part :**

1. Periodic classification of element
2. Separation of mixture
3. Acid – Base Titration
4. pH measurements
5. Preparation of soap

## **Area of Research :**

- Separate study of  $^1\text{H}$ - $^1\text{H}$  NMR ( Homonuclear cosy NMR spectroscopy) and  $^1\text{H}$ - $^{13}\text{C}$ -NMR ( Heteronuclear cosy NMR spectroscopy) for the elucidation of complex chemical compounds.
- Study and interpretation of noble steroidal compounds with the help of two dimensional nucleomagnetic resonance ( 2D-NMR ) spectroscopy
- Synthesis, Chemical and spectral studies of steroidal oxathiolanes and spirothiazolidinones for configurational study.
- Snthesis, Chemical and spectral studies of palladium catalysed coupling reactions of estradiol.

**Research Papers, Conference, Workshop, Seminar and Symposium Attended:**

**Research Papers Published in Refereed Journals :**

1. Crystallography of cholest-3,5-diene-7-one-A Steroid.  
Sheeba Shafi, Rajnikant, V.K.Gupta,, Shafiullah,Dinesh.  
*Journal of Chemical Crystallography, Vol. 32 (9) (2002) 325-329.*  
**U.S.A** *Impact Factor:1.393*
2. Structure Determination of  $3\beta$ -Acetoxy-cholest-5-ene-7-one-A Steroid  
Sheeba Shafi , Rajnikant,V.K.Gupta,S.Hashmi, Shafiullah,B.Varghese  
*Crystallography Reports, Vol. 47(1) (2002) 75-79. **Russia,***  
*Impact Factor:0. 559*
3. Synthesis and X-ray crystallography of cholest-3,5-diene-7-one-oxime  
Sheeba Shafi , Rajnikant, V.K.Gupta, Shafiullah and Dinesh.  
*Journal of Chemical Crystallography, Vol. 32(9) (2002) 75-79. **USA***  
*Impact Factor: 1.393*
4. Crystallography of cholest-4-ene-3, 6-dione-A Steroid  
Sheeba Shafi , Rajnikant,V.K. Gupta, S. Hashmi, Shafiullah, B.Varghese .  
*Crystallography Reports, Vol. 46(6) (2001) 1045-1048 **Russia***  
*Impact Factor: 0. 559*
5.  $3\beta$ - Acetoxy - $5\alpha$ -cholestane-6-one : A Steroids  
Sheeba Shafi , J.Firoz, R.Gupta

*Cryst.Res.Technol.* Vol.36 P.215-221( 2001 ); **Germany**.

6. Crystal Structure of 6-Nitro-Cholest-5-ene.

**Sheeba Shafi** ,Rajnikant,V.K.Gupta,J.Firoz,R.Gupta.

*Cryst.Res.Technol.*36,P 471-476 ( 2001 ); **Germany**.

7. Crystallographic investigations of 3 $\beta$  -acetoxy -5 $\alpha$ - Cholestane-6-one-semicarbazone : A steroids

**Sheeba Shafi** ,Rajnikant,V.K.Gupta, S.Hashmi,B.Varghese and

Dinesh ; *Cryst.Res.Technol.*36,1281-1288 ( 2001 ); **Germany**.

8. Infrared spectra of C6-spiro steroidal tetrazines

**Sheeba Shafi** ,Y.K.Agarwal and P.K.Verma

***Ind.J.Phys***,77B ( 2 ) ,207-213 ( 2003).

9. Infrared spectra of 6-oximinocholest-4-ene-4-thio-carboxylic anhydride.

**Sheeba Shafi** ,Y.K.Agarwal,P.K.Verma.

**Asia journal of physics**.....( In Press ).

10. Intramolecular Schmidt reaction of steroidal Ketones.

**Sheeba Shafi**, M.Salman Hashmi,

***Ind.J.Chemistry Section B*** , SCCB ,6387 ( 2001 )

11. Synthesis of steroidal spirothiazolidinones.

**Sheeba Shafi** , I.H. Siddui, S. A. Ansari

***J. Ind. Chem; Soc***; 234/1999 (Accepted).

12. Photoadducts of unsaturated steroidal ketone with coumarins.

**Sheeba Shafi** , Suhail Ahmad & S. Hashmi

***Ind. Chem. Soc***.....70/2000 (Accepted).

13. Photoadducts of steroidal dienone with coumarins.

**Sheeba Shafi** , Suhail Ahmad

***Ind. J. Chemistry Section B***.....Pub: SCCB 6222/2000.

14. Two dimensional NMR spectroscopy.

**Sheeba Shafi**

***Chemistry Education Review***, Vol. 15, No. 4, Page 29, April-June 2000.

15. Steroidal derivatives induced changes in lipid peroxidation of different regions of rat brain.  
Sheeba Shafi , M. Ilyas & S.J. Rizvi,  
***Hamdard Medicus***, Vol. XLIV (4) October-December, 2001.
16. Changes in the Brain lipid level induced by different steroidal derivatives in the albino rats.  
Sheeba Shafi , M.Ilyas& S.J.Rizvi  
***Hamdard Medicus*** .Vol XLV ( 2 ) April-June -2002
17. The effect of Cholesterol derivatives on changes of gangliosides in the brain of Albino rats.  
Sheeba Shafi, M.Ilyas & S.J.Rizvi  
***Hamdard Medicus*** Vol XLV ( 1 ) Jan-March -2002.
18. Neurotoxicological effects of steroidal compounds in changes of cholesterol level on albino rats.  
Sheeba Shafi , M.Ilyas & S.J.Rizvi  
***Hamdard Medicus*** ,Vol XLV ( 4 ) October- December,2002.
19. Elevation and depletion induced by cholesterol derivatives in the level of total lipids of albino rat brain.  
Sheeba Shafi & S.J.Rizvi.  
***Hamdard Medicus*** ,Vol.XLVIII ( 4),July-Sep,2005.
20. Estimation of gangliosides by cholesterol derivatives on cerebrum,cerebellum and brain stem of albino rats.  
Sheeba Shafi & S.J.Rizvi  
***Hamdard Medicus*** ,Vol.XLVI ( 3 ),July-sept –2003.

### **Workshop Attended :**

- 1.Workshop on WebCT on 10/10/2010 in College of clinical pharmacy ( Female branch) Sheeba Shafi, King Faisal University- KSA
- 2.Workshop on Introduction to King Abdulaziz City for Science and technology (KACST) in supporting of research on 03/05/2011 in College of Computer Science and Information Technology Sheeba Shafi , King Faisal University - KSA
3. First annual technology forum on May 2011 in King Fahad University of Petroleum and Minerals Sheeba Shafi ,( KFUPM ) –Dhahran –KSA



4. "Applications and new Technologies of GC and GC MS and their diversified use in the field of Petroleum, Petrochemical, Environmental and Food Industries" on 11/12/2011 in Sofitel Hotel, Sheeba Shafi, Al Khobar - KSA

5. Establishing Data Analysis and Reporting System Based on NCAAA Requirement on 11-12/ 04 /2012 in Coral Plaza, Sheeba Shafi, Al-Ahsa-KSA

### **Communicated Research Papers in Refereed Journals**

1. Photoadducts of Cholest-4-en-3 one with coumarins.  
Sheeba Shafi , Suhail Ahmad,  
**Acta, Chimia Hungarica, Hungary** .....(Communicated)
2. <sup>13</sup>C-NMR studies of steroidal ketoximes and Lactams.  
Sheeba Shafi , S. Amin  
**J. Ind. Chem. Soc** ..... 211/99 .....(communicated).
3. Synthesis of steroidal N-Hydroxyalkyl lactams.  
Sheeba Shafi , M. Salman  
**Fitoterapia**.....(communicated).
4. Structure Of 3 $\beta$ -Chloro -6-nitro-cholest-6-one.  
Sheeba Shafi,Rajnikant,V.K.Gupta.  
**Crystallography Reports;Germany** ( Manuscript N0.2486 ).
5. Crystal structure of 5 $\beta$ -cholest -6-one.  
Sheeba Shafi , Rajnikant,V.K.Gupta.  
**Crystallography Reports;Germany** (Manuscript No.256 ).
6. Structure elucidation of 3 $\beta$ -acetoxycholest-5ene-7-one -A steroid.  
Sheeba Shafi, Rajnikant,V.K.gupta  
**Crystallography Reports; Germany** ( Manuscript N0.2600).
7. Crystallography of cholest -4ene-3,6-dione -A steroid  
Sheeba Shafi , Rajnikant,V.K.gupta .  
**Crystallography Reports; Germany** ( Manuscript NO. 2540 ).
8. 3 $\beta$ -Acetoxy -5 $\alpha$ -cholest - 6-one -semicarbazone -Asteroid  
Sheeba Shafi , Rajnikant,V.K.gupta

## **Crystal Research and Technology. Germany**

( Manuscript N0. 20082101).

9. Crystallography Of Cholest –3,5- diene-7-one. –A steroid  
Sheeba Shafi , Rajnikant,V.K.gupta .  
**Bulletin of pure and applied sciences.** ( Manuscript N0.2172 ).

## **Papers Published in Conference Proceedings :**

1. Celebration of the international year of chemistry (IYC-2011),Chemical research society of India ,Eastern Zonal Meeting ,Dept.of Chemistry University Of North Bengal , India July 22-24 ,2011
2. 34<sup>th</sup> National workshop on Radiochemistry and Applications of Radioisotopes, Department of Applied Chemistry, AMU, Aligarh, Feb. 8-15, 1999.
3. Research Seminar on Frontier Areas in Chemistry, Government autonomous, K.R.G. College, Gwalior (M.P) 20th and 21th September, 1999.
4. 8<sup>th</sup> ISMAS symposium on Mass spectrometry, Indian Institute of Chemical Technology, Hyderabad, Dec. 7-9, 1999.
5. Indo-Russian ILTP seminar on Trends in chemical sciences, 24-25th Jan. 2000, Department of Chemistry, University of Delhi, Delhi- INDIA.
6. Fourth National Conference of Indian Society of Chemists and Biologists on Drug Research Scenario of 21st Century. Role of combinatorial Chemistry and High through put screening. CDRI-Lucknow from Jan, 28-30, 2000.
7. 2<sup>nd</sup> Indian Agricultural Scientists and Farmers Congress BRCC Allahabad, 19- 20 Feb., 2000.
8. 2D-NMR Study of Steroidal Ketones.  
Sheeba Shafi  
IInd National Conference on Spectrophysics NCONS, Chennai Tamilnadu, 9-11 Aug., 2000.
9. Mass Spectral Study of 3 $\beta$ -Substituted Steroidal Diastereomeric C6-Spiro oxathiolanes.  
IInd National Conference on Spectrophysics NCONS, Chennai Tamilnadu,

9-11 Aug, 2000.

10. Intramolecular Schmidt reaction of steroidal ketones.  
**Sheeba Shafi** , M. Salman Hashmi.  
Indian Council of Chemist, Page 29, 27-29th Nov. 2000,  
Shimoga,Karnataka.
11. Synthesis of steroidal selenadiazoles.  
**Sheeba Shafi** , M. Salman Hashmi.  
Indian Council of Chemist, Page 29, 27-29th Nov., 2000, Shimoga  
Karnataka.
12. Palladium as catalyst for coupling reaction of Estradiol derivatives.  
**Sheeba Shafi** i, H.Ali,J.E.Vanlier  
International symposium on green chemistry, 10-13 Jan., 2001,Delhi.

### **Research Papers Presented at Conferences:**

1. Porphyrin and phthalocyanines conjugated to steroids for photodynamic therapy of tumours  
**Sheeba Shafi** & E. H.Khan  
Celebration of the international year of chemistry ( IYC -2011 ),Chemical research society of India ,Eastern Zonal Meeting ,Dept.of Chemistry  
University Of North Bengal, Darjeeling, India July 22-24 ,Page 27 , 2011
2. Application of x-ray in structure elucidation of steroidal derivatives .  
**Sheeba Shafi**  
Celebration of the international year of chemistry ( IYC -2011 ),Chemical research society of India ,Eastern Zonal Meeting ,Dept.of Chemistry  
University Of North Bengal , Darjeeling, India July 22-24 ,Page 40 , 2011
3. 2D- NMR spectroscopy of steroids.  
**Sheeba Shafi**  
National Research Seminar on Frontier Areas in Chemistry. Government Autonomous, K.R.G. College, Gwalior (M.P.), 20th and 21th September, RP-13 Page 16, 1999.
4. Synthesis of steroidal spirothiazolidinones.  
**Sheeba Shafi** , I.H. Siddiqui and S.A. Ansari.  
National Research Seminar of Frontier Areas in Chemistry,  
Government Autonomous, K.R.G. College, Gwalior (M.P.), 20th and 21th September, RP-12 Page 15, 1999.
5. Mass spectral studies on diastereometric oxathiolane A Configurational study.  
**Sheeba Shafi** , S. Hussain, J. Feroz.  
8<sup>th</sup> ISMAS Symposium of Mass spectrometry Indian of Chemical

Technology (IICT) Hyderabad, Page 906-7, Dec. 7.9 (1999).

6. Role of Palladium as catalyst in the synthesis of benzofuran derivatives of estradiol analogue.

**Sheeba Shafi**<sup>1</sup>, H. Ali<sup>2</sup>, J.E. Van Lier<sup>2</sup>

Indo-Russian ILTP Seminar on trends in Chemical Sciences, Department of Chemistry, University of Dehli, Delhi., P. 24, 24-25th Jan. 2000.

7. Steroidal compounds induced alteration on lipid metabolism in different regions of rats brain.

**Sheeba Shafi**, Asif, S.J. Rizvi.

Fourth National Conference of Indian Society of Chemists and Biologists. Drug Research Scenario 21th Century, Role of Combinatorial Chemistry and high through put screening, C.D.R.I-Lucknow, U.P. Jan. 28-30, 2000.

8. Steroidal Compounds Induced alteration on lipid Metabolism in different regions of rat brain.

**Sheeba Shafi**, S.J. Rizvi.

2nd Indian Agricultural Scientists and Farmers, Congress BRCC Allahabad. 19-20 Feb., 2000

9. 2D- NMR study of steroidal ketone.

**Sheeba Shafi**.

IInd National Conference on Spectrophysics NCONS Chennai Tamilnadu, 9-11 Aug., 2000.

10. Mass spectral study of 3 $\beta$ -Substituted Steroidal Diastomeric C6-spiro Oxathiolanes.

**Sheeba Shafi**.

II<sup>nd</sup> National Conference on Spectrophysics NCONS, Chennai Tamilnadu, 9-11 Aug. 2000.

11. Intramolecular Schmidt reaction of steroidal ketones.

**Sheeba Shafi**, Salman Hashmi.

Indian council of chemists, page 29, 27-29th Nov. 2000 Shimiga Karnataka.

12. Synthesis of steroidal selenadiazoles.

**Sheeba Shafi**, M. Salman Hashmi.

Indian council of chemists, page 29, 27-29th Nov. Shimiga Karnataka.

13. Palladium catalysed coupling reaction of Estradiol derivatives.

**Sheeba Shafi**, H. Ali, E. Vanlier,

International symposium on green chemistry, page 24, 10-13 Jan., 2001, Delhi.

14. Photoadduct and steroidal  $\alpha$ - $\beta$ -unsaturated ketone with coumarins.

**Sheeba Shafi**, Suhail Ahmad.

88<sup>th</sup> Indian Science Congress, New Delhi, 3-7 Jan., 2001

(Communicated).

**15. Synthesis of steroidal oxazoles and thiazoles.**

**Sheeba Shafi** , R.U. Khan.

**88<sup>th</sup> Indian Science Congress, New Delhi, 3-7 Jan., 2001**  
(Communicated).

**IT skills :**

1. Successfully completed computer concepts and
2. elementary level of basic programming.
3. Microsoft office -2003
  - ( a ) : Power point presentation
  - ( b ) : XL
  - ( c ) : Words

**Communication skills :**

1. Excellent in reading, writing and speaking English
2. Fluent Arabic reading.

**Skills & Knowledge :**

1. Skill to develop & deliver the course curriculum and course material to the graduate and post graduate students.
2. Very good knowledge of teaching tips to make a class lively and interesting .Showing the creativity & innovation so that the alternate route of solution can be proposed.

**Personal Qualities :**

1. Believe in hard work & committed for the

**betterment and quality of teaching .**

**2. Friendly and co-operative to the senior and junior colleagues.**

**3. Show Self initiative & flexible in instruction taking.**

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