

<b>DR. SALMA JAVED</b>	Address 	House # 418, Block-3, Shah Faisal Colony, Karachi-75230, Pakistan
	Telephone 	+ 92 333 3934437
	E-mail 	<a href="mailto:salmajaved202@gmail.com">salmajaved202@gmail.com</a> , <a href="mailto:sajaved@uok.edu.pk">sajaved@uok.edu.pk</a>

## CAREER OBJECTIVE

An enthusiastic, adaptive and fast learning person seeking a challenging career in a dynamic research organization where I can utilize my skills gained through studies and research work in the field of biopesticide and molecular biology. Ambition is to eventually have broad-based academic career including teaching, research and management responsibilities.

## EDUCATION

Particulars	Institute	Year
PhD in Nematology (Biological Science)	National Nematological Research Center (University Of Karachi)	2013
Masters of Philosophy in Nematology	National Nematological Research Center (University Of Karachi)	2011
Bachelors of Science in Agriculture	Department of Agriculture and Agribusiness (University of Karachi)	2007

## EXPERIENCE

**National Nematological Research Centre** **November 13, 2014 – Present**  
**University of Karachi**

- ❖ **Designation**  
 Research Officer/ Lecturer for MS Students BPS-17  
 Government of Pakistan

**National Nematological Research Centre** **August 1, 2010- October 30 2014**  
**University of Karachi**

- ❖ **Designation**  
 Research Associate
- ❖ **Projects**
  1. **Project no PSF/NSLP/S-KU (65)** Entitled "Application of biopesticides entomopathogenic nematodes in vegetables fields affected with root knot nematode (August 1, 2010 – June 31, 2012)
  2. **Project no PSF/ILP/S-KU/Bio (047)** Entitled "Molecular Characterization, Mass Production and formulation of Entomopathogenic Nematodes. (July 1,2012 – October 31, 2014)

**Department of Agriculture and Agribusiness** **January 1, 2010- December 30, 2010**  
**University of Karachi**

- ❖ **Designation**  
 Visiting Lecturer
- ❖ **Courses' Responsibilities**
  1. Introduction to Plant Protection
  2. Post-harvest management & processing

## RESEARCH TRAININGS

**Guangdong Entomological Institute** **July 8, 2012 – August 19, 2012**  
**105 Xingang Road West Guangzhou 510260, China**

- ❖ **Designation**  
Research Associate
- ❖ **Research**  
Molecular characterization, mass production and formulation of Entomopathogenic nematodes

### Wheat Wide Crosses & Cytogenetic

May 10, 2010 – May 21, 2010

National agricultural Research Council, Islamabad

- ❖ **Designation**  
Internee
- ❖ **Research**  
Molecular techniques, Double haploidy, Cytogenetics

### HEJ Research Institute

June 15, 2007 – September 15, 2007

University of Karachi, Karachi.

- ❖ **Designation**  
Internee
- ❖ **Research**  
Banana Tissue Culturing and Biotransformation of Artemether Using Cell Suspension Culture of *Catharanthus roseus*

### National Nematological Research Centre University of Karachi

November 1, 2006 – December 30, 2006

- ❖ **Designation**  
Internee
- ❖ **Research**  
Identification of Field Nematodes and their Damages. Biocontrol of Different Insect By Using Entomopathogenic Nematode

## RESEARCH PUBLICATIONS

<b>2017</b>	1. <b>Salma, J.</b> , K. Nasira, M. Saima and F. Shahina (2017). Morphological and molecular identification of four new species of marine nematodes. <i>Pakistan Journal of Nematology</i> , 35 (2): 113-150.
<b>2016</b>	1. Shahina F, Tabassum K. A., <b>Salma J.</b> , Mehreen G., Knoetze R. <i>Heterorhabditis pakistanense</i> n. sp. (Nematoda: Heterorhabditidae) a new entomopathogenic nematode from Pakistan. <i>J. Helminthol.</i>
<b>2015</b>	1. Shahina, F., Tabassum, K. A., Shaukat, A., Solangi, G. S., Mehreen, G. & <b>Salma J.</b> A new entomopathogenic nematode, <i>Steinernema blaochiense</i> n.sp. (Rhabditida: Steinernematidae) from Pakistan. <i>Zootaxa</i> , 3904: 387-402. 2. Shahina, F., K. Nasira, <b>J. Salma</b> , G. Mehreen & M. I. Bhatti (2015). Description of a new root-knot nematode, <i>Meloidogyne pakistanica</i> sp. n. (Nematoda: Meloidogynidae). <i>International Journal of Nematology</i> , 25 (2): 135-144.
<b>2014</b>	1. F. Shahina, Y. Xun, Q. Lihong., H. Richou, G. Mehreen , A.K. Tabassum & <b>J. Salma</b> . A new entomopathogenic nematode, <i>Steinernema bifurcatum</i> n. sp. (Rhabditida: Steinernematidae) from Punjab, Pakistan. <i>Nematology</i> , 16, 821 –836.
<b>2013</b>	1. F. Shahina, A. K. Tabassum, G. Mehreen & <b>J. Salma</b> . <i>Steinernema maqboolii</i> n. sp. (Rhabditida: Steinernematidae) of the 'bicornatum' group from Pakistan. <i>Int. J. Nematol.</i> , 23: 59-72. 2. Salma, J. and F. Shahina Survival analysis of IJs for mass production of entomopathogenic nematodes ( <i>Steinernematidae</i> and <i>Heterorhabditidae</i> ). <i>Pak. J. Nematol.</i> , 31:171-178

2012	<ol style="list-style-type: none"> <li>1. F. Shahina, K. Firoza, G. Mehreen, <b>J. Salma</b> &amp; M. I. Bhatti. Molecular characterization of root-knot Nematodes with five new host records From Pakistan. Pak. J. Nematol., 30:129-141.</li> <li>2. F. Shahina, A. K. Tabassum, <b>J. Salma</b> &amp; G. Mehreen. Re-description of <i>Steinernema litorale</i> Yoshida, 2004 (Nematoda: Steinernematidae) on the basis of morphometric, ITS1-5.8S-ITS2 and mitochondrial region from Pakistan Int. J. Nematol., 22: 81-93.</li> <li>3. F. Shahina &amp; <b>J. Salma</b>. Mass production of eight Pakistani strains of entomopathogenic nematodes (Steinernematidae and Heterorhabditidae). Pak. J. Nematol., 30: (1) 1-20.</li> </ol>
2011	<ol style="list-style-type: none"> <li>1. F. Shahina, A. R. Kazmi, A. K. Tabassum, <b>J. Salma</b> &amp; G. Mehreen. Pathogenicity of <i>Xenorhabdus nematophila</i> (Strain Ham 10) against wax moth larvae and vine mealy bug in Pakistan. Pak. J. Nematol., 29: 15-23.</li> <li>2. F. Shahina, A. K. Tabassum, <b>J. Salma</b> &amp; G. mehreen. Biopesticidal affect of <i>Photorhabdus luminescence</i> against wax moth larvae and subterrian termite (Termitidae: Macrotermis). Pak. J. Nematol., 29: 35-43.</li> <li>3. F. Shahina &amp; <b>J. Salma</b>. Pakistani strains of entomopathogenic nematode as a biological control agent against stored product pest <i>Tribolium castaneum</i>. Pak. J. Nematol., 29: 15-23.</li> <li>4. F. Shahina &amp; <b>J. Salma</b>. Virulence of Pakistani strains of entomopathogenic nematode against <i>Lasioderma serricorne</i>. Int. J. Nematol., 21: 79-85.</li> </ol>
2010	<ol style="list-style-type: none"> <li>1. F. Shahina &amp; <b>J. Salma</b> Laboratory evaluation of Pakistani strains of entomopathogenic nematode against a stored product insect pest, rice weevil <i>Sitophilus oryzae</i>. Pak. J. Nematol., 28: 295-305.</li> <li>2. F. Shahina, A. R. Kazmi, A. K. Tabassum, G. Mehreen &amp; <b>J. Salma</b> "Evaluation of <i>Xenorhabdus nematophila</i> from <i>Steinernema asiaticum</i> against wax moth larvae and vine mealy bug in Pakistan Int. J. Nematol., 20: 203-210.</li> </ol>
2009	<ol style="list-style-type: none"> <li>1. F. Shahina, <b>J. Salma</b> G. Mehreen, A. K. Tabassum, &amp; I. H. Bhatti. Rearing of <i>Rhynchophorus ferrugineus</i> (Oliv) in Laboratory and Field conditions for carrying out efficacy studies using EPN. Pak. J. Nematol., 27: 219-228.</li> <li>2. F. Shahina, G. mehreen, <b>J. Salma</b>, A. K. Tabassum, &amp; I. H. Bhatti. <i>Rhynchophorus ferruginous</i> control using various entomopathogenic nematode isolates from Pakistan. Int. J. Nematol., 19: 219-228.</li> <li>3. F. Shahina &amp; <b>J. Salma</b>. Laboratory evaluation of seven Pakistani strains of entomopathogenic nematode against <i>Callosobruchus chinensis</i>. J. Nematol., 41- 255-260.</li> </ol>
<b>BOOKLETS</b>	
2012	<p>Shahina, F and <b>J. Salma</b> Biological control of root-knot nematodes of tomato (<i>Solanum lycopersicum</i> L.). National Nematological Research Center, University of Karachi, Karachi, Pakistan Science Foundation, Islamabad. BC&amp;T. Press university of Karachi. 16 pp</p>

<b>PATENTS</b>	
<b>Awarded 140579</b>	F. Shahina, A. R. Kazmi, A. K. Tabassum, G. Mehreen & <b>J. Salma</b> "A biopesticide <i>Xenorhabdus nematophila</i> (Strain Ham 10) against wax moth larvae and vine mealy bug in Pakistan.
<b>Awarded 140580</b>	F. Shahina, A. K. Tabassum, <b>J. Salma</b> & G.mehreen "Pathogenicity of <i>Photorhabdus luminescence</i> against wax moth larvae and subterrian termite ( <i>Termitidae: Macrotermis</i> )"
<b>Awarded 141447</b>	Shahina Fayyaz, M. H. Soomro and <b>J. Salma</b> A process of preparation in vivo and in vitro methods for mass production of entomopathogenic nematodes as a biological control agent, alternative to chemical control.
<b>Patent No. 364/2013</b>	Shahina, F., G. Mehreen and <b>J. Salma</b> (2013). Process of preparation of biopesticide PAK.S.S.71, a novel heat tolerant strain for suppression of field pest, root knot nematodes
<b>SEMINARS / CONFERENCES / WORKSHOPS</b>	
<b>9-12 April 2013</b>	National workshop on "Organic product certification" held on organized by Asian productivity organization in Karachi, Pakistan
<b>17-18 January 2013</b>	Two days workshop on "Project formulation" held on at Dr. A.Q. Khan institute of Biotechnology and Genetic engineering Auditorium, University of Karachi.
<b>24-26 May 2012</b>	12 <sup>th</sup> Nematological event "International workshop on biological control of root knot nematodes in vegetables using EPNs" on, held at University of Karachi, Karachi.
<b>01 February 2012</b>	Patent protection for R & D organized by PASTIC, PSF/HEJ/ICCBS, Karachi
<b>7-9 June 2011</b>	Three day national symposium on biodiversity of Pakistan organized by Pakistan Museum of natural history, Pakistan science Foundation Islamabad.
<b>12 May 2011</b>	One day workshop on Apiculture by Shah farms, Department of Apiculture and Agribusiness management, University of Karachi, Karachi, Pakistan.
<b>3-5 January 2011</b>	1 <sup>st</sup> International Conference of chemistry and its role in science held at Jinnah University for women, Karachi.
<b>11-15 July 2010</b>	43rd Annual meeting of the society for invertebrate pathology, 10th international colloquium on invertebrate pathology and microbial control, and the first meeting COST862: Bacterial Toxins for insect control, Trabzon Turkey.
<b>02-13 January 2010</b>	Five days' workshop on "Green spin in Biotechnology" organized by the Dr. A.Q Khan Institute of Biotechnology and Genetic engineering, University of Karachi, Karachi.
<b>17-20 August 2009</b>	Four day workshop on "Biofertilizer: importance and development using indigenous resources" organized by Centre for molecular Genetics, University of Karachi and DFID U.K and British Council, Karachi.

<b>8 May 2009</b>	One day seminar: Agriculture in Pakistan, Department of Apiculture and Agribusiness management, University of Karachi.
<b>09-12 April 2009</b>	International Symposium on the Research and Development of Entomopathogenic Nematode in Sanya, China organized by Guangdong Entomological Institute.
<b>20-23 December 2008</b>	35 <sup>th</sup> All Pakistan Science Conference on Organized by international centre for chemical and biological science/ LEJ under the auspices of University of Karachi, Karachi, Pakistan Association for advancement o science (PAAS) and Pakistan Society of Nematology.
<b>28-30 March 2007</b>	International Symposium Prospects of Horticultural Industry in Pakistan on Organized by University of Agriculture, Faisalabad.
<b>25-27 April 2006</b>	6th National Nematological Conference in Pakistan & Workshop "Integrated Nematode Disease Management held at University of Karachi, Karachi.
<b>CONFERENCE PAPERS DELIVERED</b>	
<b>3-5 January 2011</b>	1st International Conference of chemistry and its role in science held at Jinnah University for women, Karachi.
<b>11-15 July 2010</b>	43rd Annual meeting of the society for invertebrate pathology, 10th international colloquium on invertebrate pathology and microbial control, and the first meeting COST862: Bacterial Toxins for insect control, Trabzon Turkey.
<b>9-12 April 2009</b>	In International Symposium on the Research and Development of Entomopathogenic Nematode held in Sanya, China organized by Guangdong Entomological Institute.
<b>20-23 December 2008</b>	In 35th All Pakistan Science Conference, held at University of Karachi, Karachi
<b>ACHIEVEMENTS</b>	

- ❖ Pakistan society of Nematologist awarded in the oral presentation in 10th Nematological event “International Conference on Nematology in Pakistan & 35th All Pakistan Science Conference, 20-23 December 2008 held at University of Karachi, Karachi.
- ❖ Department of Agriculture selected me a President of Agarians Alumni Association in 2007
- ❖ 1st time in History of Pakistan, I Salma Javed got success with my supervisor Prof. Dr. Shahina fayyaz and my team member in making the genomic/ library database of entomopathogenic nematodes (EPN) and Root knot nematodes (RKN). In this connection more than 100 isolates of EPN and more than 75 of RKN have so far been sequenced for their identify using ITS, mt DNA and D2D3 and accession numbers are registered in NCBI Gene bank, USA and also updated sequenced of new and known worldwide reported species of EPN and RKN nematodes. This standardizes the catalogue and achieves genetic associated data and makes it easily accessible to the scientific community.

## RESEARCH SKILLS

- ❖ Command on SPSS, Costat, Bio stat, MiniTab.
- ❖ Command on Mega, PAUP and Bioedit for automatic and manual sequence alignment, inferring phylogenetic trees, and maximum parsimony analysis, neighbour bootstrap analysis, mining web-based databases, estimating rates of molecular evolution, inferring ancestral sequences, and testing evolutionary hypotheses.

## MOLECULAR BIOLOGY: ACCESSIONS NO - NATIONAL CENTRE FOR BIOTECHNOLOGY INFORMATION (NCBI)

1.	JF775374	27.	JQ894822	53.	JX144735	79.	JQ838176	105.	JN599143
2.	JF775375	28.	JQ894823	54.	JX135553	80.	JQ838177	106.	JQ838181
3.	JF892544	29.	JQ894824	55.	JX144734	81.	JQ838178	107.	JQ838182
4.	JF892545	30.	JQ894828	56.	JX135552	82.	JQ838179	108.	JQ838183
5.	JF892546	31.	JQ894826	57.	JX144736	83.	JQ838180	109.	JX144737
6.	JN157768	32.	JQ894827	58.	JX144740	84.	JX068817	110.	JX068819
7.	JN157769	33.	JX110444	59.	JX144742	85.	JX068825	111.	JX144739
8.	JN157770	34.	JX110445	60.	JX232282	86.	JX068821	112.	JX068826
9.	JN157771	35.	JX110446	61.	JX232283	87.	JX068824	113.	JX144738
10.	JN157772	36.	JX135549	62.	JX144743	88.	JX068822	114.	KC02713
11.	JN157773	37.	JX135545	63.	JX144741	89.	JX068820	115.	JQ806342
12.	JN157774	38.	JX135546	64.	JX232285	91.	JN571099	116.	JQ806344
13.	JN571085	39.	JX135547	65.	JX144744	90.	JN571098	117.	JQ806341
14.	JN571086	40.	JX135550	66.	JX232284	92.	JN571100	118.	JQ806345
15.	JN571087	41.	JX068812	67.	KC625524	93.	JN571101	119.	JQ806351
16.	JN571088	42.	JX068813	68.	KC625525	94.	JN571102	120.	JQ806340
17.	JN571089	43.	JX068814	69.	KC625526	95.	JN571103	121.	JQ806348
18.	JN571090	44.	JX068815	70.	KC625527	96.	JN571104	122.	JQ806352
19.	JN571091	45.	JX068816	71.	KC625528	97.	JN571105	123.	JQ731889
20.	JN571092	46.	JX135555	72.	KC625529	98.	JN571106	124.	JQ731886
21.	JN571093	47.	JX135556	73.	KC625519	99.	JN571107	125.	JQ806349
22.	JN571094	48.	JX135557	74.	KC625520	100.	JN599138	126.	JQ806346
23.	JN571095	49.	JX135551	75.	KC625521	101.	JN599139	127.	JQ806343
24.	JN571096	50.	JX135554	76.	KC625522	102.	JN599140	128.	JQ806350
25.	JN571097	51.	JX135558	77.	KC625523	103.	JN599141	129.	JQ806347
26.	JQ894821	52.	JX144733	78.	JQ795723	104.	JN599142	130.	JQ731888

PERSONAL	
Marital Status	Married
Husband's Name	Qaseem Usman Rais
CNIC #	42201-7013931-8
Passport #	AQ8679312
Nationality	Pakistani
Date of Birth	August 25, 1985
REFERENCES	
<p><b>Dr. Saleem Shahzad</b>  Chairmen: Department of Agriculture &amp; Agribusiness  Management, University of Karachi, Karachi,  Pakistan  Phone: 0092332209039  Email: <a href="mailto:sshahzad@uok.edu.pk">sshahzad@uok.edu.pk</a></p> <p><b>Dr. Manzoor H. Soomro</b>  President Economic Cooperation Organization Science  Foundation (ECOSF), Islamabad, Pakistan  Phone: 00923009805611  Email: <a href="mailto:manzoorhsoomro@gmail.com">manzoorhsoomro@gmail.com</a></p> <p><b>Dr. S. Asim Rehan Kazmi</b>  Director Crop Diseases Research  Institute, Pakistan Agricultural  Research Council, Karachi  University Campus, Karachi,  Pakistan Phone: 00923002356301  Email.: <a href="mailto:coordparc@yahoo.com">coordparc@yahoo.com</a></p> <p><b>Dr. Richou Han</b>  Director Guangdong Entomological  Institute, 105 Xingang Road West,  Guangzhou 510260, China Email: <a href="mailto:rich-han@vip.tom.com">rich-han@vip.tom.com</a></p>	