

NAME	Archna Kumar		
DESIGNATION	Associate Professor		
EMAIL ID	akumar21@amity.edu		
CONTACT NUMBER	09999114407		
RESEARCH INTERESTS	Signaling mechanism, Host plant Interaction, Nano formulation development, Sensor development		
EDUCATIONAL QUALIFICATIONS:			
Name of College / University	Degree	Year	
Delhi University –IARI New DelHi	PhD	2004	
Title of Ph.D. thesis: <i>BEHAVIOURAL MORPHOLOGICAL AND MOLECULAR DIFFERENTIATION AMONG SIX TRICHOGRAMMATIDS(HYMENOPTERA : TRICHOGRAMMATIDAE)</i>			
EXPERIENCE (in chronological order): Total 20 Years Research & Teaching			
Designation	Type of post held (teaching/ research)	Name of the Institute	Year (From – To)
SRF,RA	Research	Indian Agriculture Institute of India (IARI)	1999 to July 2006
Lecturer	Teaching& Research	Amity Institute of Biotechnology, Amity University Uttar Pradesh	July 2006 to June 2008
Sr. Lecturer	Teaching& Research	Amity Institute of Biotechnology, Amity University Uttar Pradesh	2008 to July 2010
Assistant Professor	Teaching& Research	Amity Institute of Biotechnology, Amity University Uttar Pradesh	August 2010 to March 2019
Associate Professor	Teaching& Research	Amity Institute of Biotechnology, Amity University Uttar Pradesh	April 2019 to till dated
No. of Ph.D. students supervised	4- completed 2- ongoing		
No. of Post-Doc			
No. of M.Tech. Students supervised:	>20		
No. of B.Tech. Students supervised:	>25		
PUBLICATIONS	<ol style="list-style-type: none"> Archna, A.V.N.Paul ,V. G. Malathi , K.S. Usha Rani and Singh A.K. Utilization Of Internal Transcribed Spacer Region Sequences Of Ribosomal DNA For Molecular Differentiation of Four Trichogrammatids. (2006). <i>Indian Journal of entomology</i>. 67(4): 321-327. Archna, A. K. Singh, A. V. N. Paul and Anju Jain. Synomonal Effect of Nine Varieties and One Culture of Rice on <i>Trichogramma japonicum</i> Ashmead and <i>Trichogramma chilonis</i> (GS) (Ishii). (2009). <i>Acta Entomologica Sinica</i>. 52(6): 656-664. R. Maruthadurai, R.D. Gautam and Archna. Behavioural response of <i>Trichogramma chilonis</i> ishii (Hymenoptera: Trichogrammatidae) to kairomones. <i>Indian Journal of Entomology</i>. (2011). 73(3): 247-252. Archna, A. K. Singh and A. V. N. Paul, Zayeem Asfia. Synomonal effect of eight varieties of rice on <i>Trichogramma brasiliensis</i> Ashmead and <i>Trichogramma exiguum</i> Pinto and Platner 		
REFERRED JOURNALS -20			
BOOK CHAPTER IN CONFERENCE PROCEEDINGS-4 PATENT-1 CONFERENCES AND SYMPOSIUM >40			

(Hymenoptera: Trichogrammatidae). (2011) *Iranian journal of entomology*. 1, 1-7.

5. **Kumar A**, Zayeem A. and Kanameni S. Synomonal effect of Cole crops on individual and associative learning behaviour of *cotesia plutellae*. (2012). *IJBPAS*, 1(3): 285-298.
6. Shipra Mathur, Asfiya Zayeem, Srikanth Kanameni, Monica Tibrewal, NitishWadhwa, Priti Arora and **Archna Kumar**. Effect of Various Concentration of Octacosane, Pentacosane and Tricosane on Foraging Behavior of Trichogrammatids. (2012). *International Journal of Scientific And Research Publication*. Volume 2, Issue 6.
7. **Kumar A**, Zayeem A. Orientation response of *Cotesia plutellae* towards kairomones emanating from *Plutella xylostella* and *Corcyra cephalonica*. (2013). *Iranian journal of entomology*. 3: 1-5.
8. **Archna kumar**, Abhilasha Vermin, P. Barooah. Nidhi Wadhwa and Asfiya Zayeem. Impact of synomones on foraging response of larval parasitoid *Bracon brevicornis*. (2013). *Annals of plant protection*. 77-83.
9. Asfiya Zayeem and **Archna Kumar**. Impact of Synomones Emanating from Three Cole Crop Varieties on Foraging Behaviour of *Trichogramma brasiliensis* Ashmead (Hymenoptera: Trichogrammatidae). (2012). *Annals of Plant Protection Sciences* 112-114.
10. Sakshi Gandotra, Pinky Mony Bhuyan, Dip kumar Gogoi, **Archna Kumar** and S. Subramanian. Screening of nutritionally important gut bacteria from the lepidopteran insects through qualitative enzyme assays. (2016). *Proceeding of National Academy of biological Sciences*. ISSN: 0369-8211 (print version) DOI 10.1007/s40011-016-0762-7.
11. Udai Pratap Singh, Surabhi Singh, Rajendra Kumar & **Archna Kumar**. Study on foraging response of Trichogrammatids governed by volatile cues (2018) *Tropical Ecology* 58(4): 741-750.
12. Sakshi Gandotra, **Archna Kumar** , Kailash Naga , Pinky Moni Bhuyan , Dip K.Gogoi, Kirti Sharma., Sabtharishi Subramanian. Bacterial community structure and diversity in the gut of Muga silkworm, *Antheraea assamensis* (Lepidoptera: Saturniidae) from India *Insect molecular biology* April 2018 DOI: 10.1111/imb.12495.
13. Surabhi Singh, Bishwajeet Paul and **Archna Kumar**. Interaction study of volatile cues emitted from Potato variety Kufri Surya and Four Trichogrammatids. *International Journal of Agricultural and Statistical Sciences*. July 2018.
14. **Surabhi Singh**, Bishwajeet Paul and Archna Kumar. Impact of volatile cues on foraging response of egg larval parasitoid, *Chelonus blackburni* Cameron. *Indian Journal of Agricultural Research*. (February, 2019)

	<p>15. Archna Kumar , Srikanth K, Priti Arora and Asfiya Zaeem. Formulation of crucifer plant volatiles and assessment of their impact on parasitic efficiency of <i>Trichogramma chilonis</i>. Vol. 18 No.2. <i>Plant Archives</i>.</p> <p>16. UP Singh, S Singh, R Kumar, NS Chauhan, A Kumar. Effects of allelochemicals from leachates of larvae of <i>Leucinodes orbonalis</i> Guenee and leaves of Brinjal, Chilli and Tomato on the foraging behaviour potential of Trichogrammatids. <i>Allelopathy Journal</i> 50 (2), 195-212 (2020).</p> <p>17. UP Singh, S Singh, R Kumar, A Kumar . Brinjal synomones as stimulants for three Trichogrammatids <i>International Journal of Biology, Pharmacy and Allied Sciences</i> 9 (6), 1357-1366 (2020).</p> <p>18. Astha Mishra ,Nipunika Sahagal ,Udai Pratap Singh, Surabhi Singh and Archna Kumar. Assessment of foraging potential of <i>Trichogramma brasiliensis</i> (Ashmead) and <i>Trichogramma chilonis</i> Ishii towards combinations of Octacosane , Pentacosane and Tricosane based formulations. <i>International Journal of Biology, Pharmacy and Allied Sciences</i>. Volume 10(7). July 2021.</p> <p>19. Deepika and Archna kumar. Status, pathogenicity of plant parasitic nematode: A review. <i>International Journal of Entomology Research</i> 6 (5), 78-82.</p> <p>20. Surabhi Singh and Archna Kumar. Evaluation of foraging potential of Trichogrammatids through application of straight chain hydrocarbons. <i>J. Exp. Zoo. India</i>. Vol. 25, No. I, January 2022.</p>
<p>PATENTS (total no.)-1</p>	<p>Archna Kumar and Asfiya Zayeem. 2012. Fuller’s earth clay based semiochemical formulation. Id -2859/DEL/2011</p>
<p>RESEARCH PROJECTS Completed: (total no.):2 Ongoing: (total no.):1</p>	<p>Completed: PROJECT TITLE: “Field study and analysis for exploitation of allelochemicals for effective Biological Control in Cabbage and Cauliflower growing area of Uttar Pradesh and Haryana.” Funding agency: Department of science and technology PROJECT TITLE: Development of allelochemical formulation to enhance the efficacy of natural enemies against potato crop pests. Funding agency: Uttar Pradesh Council of Agricultural Research</p> <p>Ongoing : PROJECT TITLE: Signaling mechanism in the Tri-trophic interaction between Brassicaceous plants, their insect pest and parasitoid of the pest Funding agency: DST-SERB</p>
<p>AWARDS & HONOURS/ DISTINCTIONS</p>	<p>ICAR fellowship during Ph.D.</p>
<p>MEMBERSHIP with Professional/ Academic bodies</p>	<p>Life Time Member of -The entomological society of India Life Time Member of Society for Bio control advancement Life Time Member of Uttar Pradesh Academy of Agricultural Sciences Life Time Member of SAVE THE ENVIRONMENT (STE)</p>

