


## Curriculum Vitae

<b>Full Name:</b>	DR. MONA SEMALTY			
<b>Designation:</b>	Assistant Professor Co-Coordinator, SWAYAM Cell			
<b>Department:</b>	Pharmaceutical Sciences			
<b>Campus:</b>	Srinagar/Chauras			
<b>Telephone:</b>	01370267395	<b>Fax:</b>		
<b>Mobile:</b>	9997255672			
<b>Email</b>	<a href="mailto:monasemalty@gmail.com">monasemalty@gmail.com</a> , <a href="mailto:mona.semalty@hnbgu.ac.in">mona.semalty@hnbgu.ac.in</a>			
<b>Education Qualification:</b>	M. Pharm. (Pharmaceutics), MBA (Operations Management); Ph. D.			
<b>Teaching Experience:</b>	17 Years	<b>Research Experience:</b>	15 Years	
<b>Research Interest and Fields of Specialization</b>				
<ol style="list-style-type: none"> <li>1. Cyclodextrin and lipid complexes (phytosomes)</li> <li>2. Herbal drug delivery for obesity and hair loss</li> <li>3. Micro and nanoparticles for drug delivery</li> <li>4. OER and MOOC development</li> <li>5. Academic Writing, Research Methodology</li> </ol>				
<b>Honours &amp; Awards</b>				
<ol style="list-style-type: none"> <li>1. Academic writing MOOC ranked number one in exam registration in India.</li> <li>2. Academic Writing MOOC listed in best 30 online courses of 2019 in the Class Central list as declared by Press Information Bureau and MHRD, Govt. of India. (<a href="http://tiny.cc/pib27april2020">http://tiny.cc/pib27april2020</a>)</li> <li>3. Best Research paper in national Conference</li> </ol>				
<b>Member of Academic Institutions</b>				
<ol style="list-style-type: none"> <li>1. Scientific Expert- Ministry of Institution and University Research (MIUR), Italy</li> </ol>				
<b>Membership of Scientific Organizations</b>				
<ol style="list-style-type: none"> <li>1. Expert DST-SERB, Govt. of India</li> <li>2. Life Member of APTI and IPA.</li> <li>3. Peer reviewer- various major publishers (Springer, Elsevier, Betham, Taylor&amp; Francis, Medknow, Kluwer etc.) of journals of repute</li> <li>4. Executive Member of APTI Women's Forum Uttarakhand (2016-19)</li> <li>5. Executive member- APTI Women Forum, Uttarakhand.</li> </ol>				
<b>Research Supervision (No. of Ph.D. Degree Awarded/Submitted/Registered)</b>				
24 M. Pharm. Project guided 02 registered				
<b>Research Projects/ MoU undertaken</b>				
<ol style="list-style-type: none"> <li>1. Major research project, "Studying drug CD complexes using ADXRD beamline (BL-12), Indus 2" (CRS-310), by UGC-DAE CSR, Indore, Principal Investigator, Rs. 13.40 Lac</li> <li>2. Major research project entitled "Synthesis of polymeric cyclodextrin nanoparticles: Effect of radiation" granted to me by UGC-DAE CSR, Kolkata, (Co-Principal Investigator), Rs 13.40 Lac, Ongoing.</li> <li>3. UGC-DAE CSR, Mumbai in collaboration with Bhabha Atomic Research Centre (BARC), Major research Collaborative Research Scheme Project, Mumbai, "Small angle Neutron scattering study</li> </ol>				

of the interaction between drug and cyclodextrins in drug-cyclodextrin complexes”, (Co-Principal Investigator) Rs 11.34 Lac, Ongoing.

4. UGC SWAYAM MOOC, Co-Course Coordinator; “Academic writing” (15 week, 40 e- modules; 4 credit course), UGC 2018-20; Course developed and available on SWAYAM; Rs 13.5 Lac, Completed.
5. CEC SWAYAM MOOC, Co-Course Coordinator; “Industrial Pharmacy I” (12 week, 40 e- modules; 4 credit course); CEC, 2018-20; Course developed and available on SWAYAM; launched on JULY 2019; Rs 13.5 Lac, Completed.
6. Consultancy Project on Pharmacovigilance programme, Jai Pharma Ltd. Mumbai, a unit of Mylan Pharm. Pvt. Ltd., Logistic support, Dr Ajay Semalty and Dr Mona Semalty, 2016 September Onward.
7. UGC Govt. of India, Major Research Project, Preparation and evaluation of effective herbal formulations for alopecia (baldness) and identification of chief constituent(s), July 1st 2015- June 30, 2018. (Rs. 10.95 Lac), (Principal Investigator).
8. DST-SERC Govt. of India, Project entitled Phytosome in improving hepatoprotective activity of phytoconstituents, (Co-Principal Investigator) Feb. 2008-March 2011 (Completed); (Rs. 20.15 Lac)
9. UGC Govt. of India, Project entitled Development of value added herbal drug delivery systems of some polyphenolic phytoconstituents, (Co-Principal Investigator) March 2010- March 2012. (Completed); (Rs. 1.75 Lac)
10. AICTE Govt. of India, Project entitled Phytosphospholipid complexes in improvement of bioavailability of some herbal drugs, (Co-Principal Investigator) July 2010- July 2012. (Completed); (Rs. 10.00 Lac)
11. Dr Mona Semalty (PI), AICTE Govt. of India, Project entitled “Development & Characterization of Phytopharmaceuticals for Hair Growth Promotion”, (Principal Investigator) March 2010- Aug. 2011. (Rs. 4.3Lac).

#### **Administrative Experience**

1. Co-Coordinator- University SWAYAM Cell
2. Successfully performed additional administrative duties as Warden of girls’ hostel (Bhagirathi Girls’ Hostel Chauras Campus) of H.N.B.G. (Central) University Srinagar Garhwal from Aug. 2006 to Oct 2011.
3. Member Anti Ragging & Disciplinary Committee

#### **Scientific Visits Abroad/ International Collaboration**

1. Scientific Expert- Ministry of Institution and University Research (MIUR), Italy

#### **Conference/Symposium/Workshop Attended during last five years**

##### **International**

1. Nitin Kumar, Lokesh Adhikari, VK Aswal, Ajay Semalty, **Mona Semalty**, Preparation and Characterization of Naringenin Loaded Nanoparticles, International Conference On Material Science and Applications (ICMSAA), 25-27 November 2019, Department of Physics Chauras Campus, HNBSG Srinagar Garhwal
2. Mona Semalty, Mixed hydrotrophy in improving aqueous solubility and dissolution of poorly water soluble drugs, International Conference on Pharmaceutical Sciences, 14-15 Feb. 2014, SGRITS Patelnagar Dehradun.

##### **National (Invited lectures and paper presentation)**

1. “Effective Literature Review” and “Using Literature Databases” Summer School on Research and Publication Ethics by UGC-HRDC Kumaun University Nainital (26/08/20 to 08/09/2020); 07/09/2020.
2. “Journal Metrics” and “Author Metrics” Summer School on Research and Publication Ethics by UGC-HRDC Kumaun University Nainital (26/08/20 to 08/09/2020); 31/08/2020.
3. “Research Proposal Writing” in National Workshop “Publication Ethics: Academic Writing for Research Publication” organized by Department of Education, Assam University Silchar, 25/08/2020.
4. “Research Paper writing” & “Research Proposal Writing”, Short Term Course in Research Methodology for university/college teachers. UGC-HRDC, Kumaun University, Nainital, Sept. 16, 2019.
5. “MOOC Development” in the One week workshop on “MOOC and Open Educational Resources” [July

- 22 to 27, 2019] organized by Human Resource Development Centre (Erstwhile ASC), GJ University S&T, Hisar on 26th July, 2019
6. "Academic Writing" in Induction/Orientation Program for the teachers of Higher Education conducted by Faculty Development Centre (FDC), HNB Garhwal University, Srinagar Garhwal (15 May-30 June, 2019), 6th June 2019.
  7. "Basic Rules of Academic Writing" in one week workshop held by Department of Education, HNB Garhwal University, Srinagar Garhwal, 22nd May, 2019.
  8. "Finding OERs for Teaching Learning and Issue of Plagiarism" 15th October, 2018, Workshop on "Using and Developing Open Educational Resources and MOOCs" for the teachers of Higher Education during 12-18 October, 2018.
  9. "e-PG Pathshala, MOOCs Development" 16th October, 2018, Workshop on "Using and Developing Open Educational Resources and MOOCs" for the teachers of Higher Education during 12-18 October, 2018.
  10. "Coping with stress" Govt. Girls Inter College, Srinagar Garhwal, 13th Dec. 2018.
  11. "Career Counselling" Govt. Girls Inter College, Srinagar Garhwal, 12th Dec. 2018.
  12. Adhikari L, Pandey M, Kotiyal R., Semalty A, Semalty M. Preparation and evaluation of hair growth formulations of Indian ginseng (*Withania somnifera*) for alopecia 1st Annual conference of society for Himalayan Action Research and Development (SHARAD) on Recent Advances in Chemical & Nano Sciences. Department of Chemistry, Pauri Campus, HNB Garhwal University, Srinagar Garhwal. Dated 29-30 October, 2018. (Oral Presentation)
  13. Ajay Semalty, Mona Semalty, Chitosan Microspheres of Diltiazem Hydrochloride: Effect of Drug to Polymer Ratio and Concentration of Crosslinking Agent, National Conference on Recent Advances in Biosciences and Drug Discovery, Department of Pharmaceutical Sciences, Gurukul Kangri Vishwavidyalaya, Haridwar, (3-4 March, 2014).
  14. Adhikari L, Semalty M, Naruka PS, Aswal VK, Semalty A. Binary complexes of glimepiride with cyclodextrin for improved solubility and drug delivery. 1st Annual conference of society for Himalayan Action Research and Development (SHARAD) on Recent Advances in Chemical & Nano Sciences. Department of Chemistry, Pauri Campus, HNB Garhwal University, Srinagar Garhwal. Dated 29-30 October, 2018. (Oral Presentation)
  15. Adhikari L, Semalty M, Naruka PS, Aswal VK, Semalty A. Effect of different cyclodextrin in Amphotericin B-cyclodextrin binary complexes: solubility, spectral and small angle neutron scattering study. 1st Annual conference of society for Himalayan Action Research and Development (SHARAD) on Recent Advances in Chemical & Nano Sciences. Department of Chemistry, Pauri Campus, HNB Garhwal University, Srinagar Garhwal. Dated 29-30 October, 2018. (Oral Presentation)
  16. Adhikari L, Pandey M, Kotiyal R., Semalty A, Semalty M. Preparation and evaluation of hair growth formulations of Indian ginseng (*Withania somnifera*) for alopecia 1st Annual conference of society for Himalayan Action Research and Development (SHARAD) on Recent Advances in Chemical & Nano Sciences. Department of Chemistry, Pauri Campus, HNB Garhwal University, Srinagar Garhwal. Dated 29-30 October, 2018. (Oral Presentation)
  17. Mona Semalty, Mukesh Pandey, Ajay Semalty, Preparation and evaluation of hair growth formulation of *Withania somnifera* fruits for alopecia, National conference on Recent frontiers in Chemistry (NRF 2018), Department of Chemistry, HNB Garhwal University, 27-28 April 2018.
  18. Mukesh Pandey, Mona Semalty, Ajay Semalty, Effect of geographical location on total phenol and flavonoid content and antioxidant activity, National conference on Recent frontiers in Chemistry (NRF 2018), Department of chemistry, HNB Garhwal University, 27-28 April 2018.
  19. Mona Semalty, Ajay Semalty, Current trends and challenges in pharmaceutical sciences, National seminar, IPGA, BN College of Pharmacy, Udaipur, Rajasthan, 24-25 Sept. 2017.
  20. Mona Semalty, Ajay Semalty, Study of Naringenin-phosphatidylcholine and naringenin-beta cyclodextrin interaction in the complexes, National Conference on Study of Matter Using Intense Radiation Sources and Under Extreme Conditions, UGC-DAE Consortium for Scientific Research (UGC-DAE CSR) University Campus, Khandwa Road, Indore 03-06 November 2016.
  21. National Workshop on "Role of Open Education Resources in Higher Education" conducted by FDC, HNB Garhwal University, Srinagar Garhwal, from 15/12/17 to 17/12/17.
  22. Short Term course on "Open Education Resources in Higher Education" conducted by FDC, HNB

Garhwal University Srinagar Garhwal, from 04/09/17 to 09/09/17.

#### Conference/Symposium/Workshop Organized during last five years

- Academic Writing Workshop: Ethiopia Chapter (SWAYAM Outreach Program), 20/08/2020. (Organized)
- International webinar: Academic Writing: from Basic to advanced (Leaving Impact: The Uganda Chapter), 06/07/2020.
- “Demo on Virtual Classrooms for faculty members”, organized by SWAYAM Cell in association with Microsoft Team, 29 June 2020. (Organized)
- International webinar: Academic Writing: from Basic to advanced (Leaving Impact: The Brasil Chapter), 29/06/2020. (Organized)
- Member Organizing Committee APTICON 2019 (International Annual Conference of APTI), 11-13 October, 2019. Dehradun.
- Academic Writing: From Basic to advanced (The Philippines Chapter), 21/06/2020. Special Assistance, Workshop on “Using and Developing Open Educational Resources and MOOCs” for the teachers of Higher Education during 12-18 October, 2018 conducted by Faculty Development Centre (FDC), HNB Garhwal University, Srinagar Garhwal.

#### Publications during last five years

##### Journals

##### International

##### 2018-19

1. Mukesh Pandey, Lokesh Adhikari, Rupali Kotiyal, Ajay Semalty, Mona Semalty, Preparation and evaluation of hair growth formulations of Indian ginseng (*Withania somnifera*) for alopecia, Asian Journal of Biological Sciences, 2019, 12, 524-532.

##### 2017-18

2. Lokesh Adhikari, Rupali Kotiyal, Mukesh Pandey, Meenakshi Bharkatiya, Ajay Semalty, Mona Semalty, Effect of geographical location and type of extract on Total phenol/flavon contents and antioxidant activity of different fruits extracts of *Withania somnifera*, Curr Drug Discov Technol. 2018,15: In Press. ISSN: 1570-1638; PMID: 24188445. *Impact factor*. 2.367; DOI: [10.2174/1570163815666180807100456](https://doi.org/10.2174/1570163815666180807100456).
3. Mona Semalty, Lokesh Adhikari, Divya Semwal, Anita Chauhan, Akash Mishra, Rupali Kotiyal and Ajay Semalty, A comprehensive review on phytochemistry and pharmacological effects of Stinging Nettle (*Urtica dioica*), Current Traditional Medicine, 2017, 3(3), 156-67. ISSN 2215-0846. DOI: [10.2174/2215083803666170502120028](https://doi.org/10.2174/2215083803666170502120028)
4. Mona Semalty, Lokesh Adhikari, Anita Chauhan, Akash Mishra, Divya Semwal, Rupali Kotiyal, Ajay Semalty, Obesity and herbal drug research: Exploring the safer alternative and lead molecule, Current Traditional Medicine, 2017, 3(2), 74-92. ISSN 2215-0846. DOI: [10.2174/2215083803666170309124540](https://doi.org/10.2174/2215083803666170309124540)

##### 2015-16

5. Madhuri Maher, Mukesh Pandey, Lokesh Adhikari, Ajay Semalty, Mona Semalty, Effect of hydrophilic excipients on cyclodextrin complexes of acyclovir in improving solubility, dissolution and permeability, Letters in Drug Design & Discovery, 2016,13(8), 771-780. ISSN: 1570-1808. DOI: [10.2174/1570180813666160517161058](https://doi.org/10.2174/1570180813666160517161058), **Impact Factor**: 1.17
6. Mukesh Pandey, Madhuri Maher, Mona Semalty, Ajay Semalty. Natural macromolecules in the development of safe and effective gastroretentive floating microparticles of metformin hydrochloride. The Natural Products Journal, 2016, 6 (1), 62-72. <http://dx.doi.org/10.2174/2210315506999151209101058> ISSN: 2210-3155.
7. Divya Semwal, Rupali Kotiyal, Anita Chauhan, Akash Mishra, Lokesh Adhikari, Ajay Semalty, Mona Semalty, Alopecia and the herbal drugs, An overview of the current status, Advances in Biomedicine and Pharmacy. 2015; 2(6): 246-254. ISSN: 2313-7479. DOI: [10.19046/abp.v02i06.01](https://doi.org/10.19046/abp.v02i06.01)
8. Ajay Semalty, Rahul Kumar, Mona Semalty. Anti-hyperlipidemic and anti-obesity activities of ethanolic extract of *Trigonella foenum graecum* (seeds) of Himalayan region in diet induced obese mice, Advances in Biomedicine and Pharmacy. 2015; 2(5): 229-34. ISSN: 2313-7479. <http://dx.doi.org/10.19046/abp.v02i05.05>

##### 2014-15

- Ajay Semalty, Mona Semalty, Yuveraj Singh Tanwar, Devendra Singh, M. S. M. Rawat, Phosphatidylcholine complex in improving oral drug delivery of epicatechin: preparation and characterization, **Journal of Drug Discovery and Development**, 2014, 1, 46-55. ISSN: 2349-7777.

#### 2013-14

- A. Semalty, YS Tanwar, M Semalty, Preparation and characterization of cyclodextrin inclusion complex of naringenin and critical comparison with phospholipid complexation for improving solubility and dissolution, **Journal of Thermal Analysis and Calorimetry** 2014, 115, 3:2471-2478. ISSN: 1388-6150; DOI 10.1007/s10973-013-3463-y. **Impact Factor: 2.209**.
- Semalty M, Panchpuri M, Singh D, Semalty A, Cyclodextrin inclusion complex of racecadotril: effect of drug- $\beta$ -cyclodextrin ratio and the method of complexation, **Curr Drug Discov Technol.** 2014,11(2):154-61. ISSN: 1570-1638; PMID: 24188445. **Impact factor. 2.367; DOI: [10.2174/15701638113106660043](https://doi.org/10.2174/15701638113106660043)**

#### National

#### 2018-19

- Adhikari L, Semalty M, Naruka PS, Aswal VK, Semalty A. Binary complexes of glimepiride with  $\beta$ -cyclodextrin for improved solubility and drug delivery, **Indian Drugs**, 2019, 56, 3, 54-60. ISSN: 0019-462X.

#### 2015-16

- Mona Semalty, Rahul Kumar, Ajay Semalty, Formulation and characterization of herbal formulation for antihyperlipidemic activity in diet induced obese mice, **Indian Drugs**, 2016;53(7):30-34. ISSN: 0019-462X

#### 2013-14

- Mona Semalty, Prateeksha Badoni, Devendra Singh, Ajay Semalty, Modulation of solubility and dissolution of furosemide by preparation of phospholipid complex, **Drug Development and Therapeutics (ERSTWHILE Chronicles of Young Scientists)**, 2014;5(2): 172-76; ISSN: 2394-6555.
- Mona Semalty, Mitali Panchpuri, Devendra Singh, Ajay Semalty, Effect of drug  $\beta$ -CD ratio and method of complexation in the development of cyclodextrin inclusion complex of ofloxacin, **Indian Drugs**, 2013, 50(12), 34-40.ISSN: 0019-462X.

#### Other General Publications

- Semalty M., Ten commandments of Digital learning through MOOCs: SWOT Analysis, **CEC News**, Nov. 2019, 5-6.

#### Books

- Semalty A, Semalty M, Semalty's Industrial Pharmacy I, Pharma Med Press, Hyderabad, India, 2020, In Press.
- Semalty A, Semalty M, Semalty's Review: Industrial Pharmacy I, Pharma Med Press, Hyderabad, India, 2020, In Press.
- Ajay Semalty, Mona Semalty, M.S.M. Rawat, **Essentials of Pharmaceutical Technology (Second Edition)**, 2018, reprint 2019, ISBN 9789386819994, Pharma Med Press, Hyderabad, India.
- Mona Semalty, Ajay Semalty, **Essentials of Research: A Mini Guide**, 2012, ISBN 978-3-659-30545-0, LAP Lambert Academic Publishing, Saarbrucken, Deutschland, Germany.
- Ujjwal Nautiyal, Ajay Semalty, **Buccal Film (Enalapril): A most promising route for drug delivery**, 2012, ISBN 978-3-8484-9422-4, LAP Lambert Academic Publishing, Saarbrucken, Deutschland, Germany.
- Ajay Semalty, Mona Semalty, M.S.M. Rawat, **Essentials of Pharmaceutical Technology**, 2011, ISBN 978-93-81075-34-0, Pharma Med Press, Hyderabad, India.
- Ajay Semalty, Mona Semalty. **Art of Writing and Publishing in Pharmaceutical Journals**, 2007, ISBN 81-88449-21-0, Pharma Book Syndicate, Hyderabad, India.

#### Patents:

- Ajay Semalty, Rahul Kumar, **Mona Semalty**, A novel synergistic herbal formulation for antihyperlipidemic and antiobesity activity, Patent no. 309685, appl no. **2965/DEL/2012; Granted**.
- Mona Semalty**, Tejprakash Sevak, Ajay Semalty, Y. S. Tanwar, M.S.M. Rawat, Synergistic Herbal Hair Growth Formulation For Alopecia, Published on 18/04/2014. **(2896/DEL/2012)**; FER defended, amended stage.

## Massive Open Online Courses (MOOCs) with record enrolments (more than 35000 learners across 95 countries)

- Course Coordinator; “Research Methodology” (15 week, 40 e- modules; 4 credit course), is approved by UGC on April 2019, under development, ongoing
- Co-Course Coordinator; “Academic writing” (13 week, 40 e- modules; 4 credit course), is approved by UGC on April 2018; Course developed; [https://swayam.gov.in/nd2\\_ugc19\\_ge03/preview](https://swayam.gov.in/nd2_ugc19_ge03/preview) (July Oct. 2019 cycle) & [https://swayam.gov.in/nd2\\_cec20\\_ma04/preview](https://swayam.gov.in/nd2_cec20_ma04/preview) (January- July 2020 Semester); ([https://swayam.gov.in/nd2\\_cec20\\_ge29/preview](https://swayam.gov.in/nd2_cec20_ge29/preview), July Oct. 2020 cycle).
- Co-Course Coordinator; “Industrial Pharmacy I” (12 week, 40 e- modules; 4 credit course); approved by CEC on April 2018; Course developed; [https://swayam.gov.in/nd2\\_cec19\\_ge01/preview](https://swayam.gov.in/nd2_cec19_ge01/preview); (July Oct. 2019 cycle); [https://swayam.gov.in/nd2\\_cec20\\_lb05/preview](https://swayam.gov.in/nd2_cec20_lb05/preview), (July Oct. 2020 cycle).
- Contributed more than 25 hrs video lectures for SWAYSMPRABHA channel no. 15 on Cosmetics and Pharmaceutics I (May-September 2020).

### Total Number of Research Publications:

#### Publications

#### Publications

Papers	-	61 (31 International, 30 National)
Scientific Abstracts	-	72 (14 International, 58 National)
		(1 international; 21 National presented)
Chapter in Book	-	02 (01 International, 01 National)
Books	-	07 (02 In press)
<b>Patents (Indian)</b>	-	<b>02 (1 granted, 1 published/ in final stage)</b>
E content development	-	more than 100 hrs
<b>MOOCs (SWAYAM online courses)-</b>		<b>02 (by UGC and CEC)</b> > 50 hrs of video lectures
E -Modules for ARPIT Course	-	<b>04</b>
SwayamPrabha e-modules	-	<b>25 hrs</b>
<b>Total citations</b>	-	<b>&gt;1700</b>
<b>H index</b>	-	<b>23</b>
<b>I10 Index</b>	-	<b>31</b>
<b>Total Impact</b>	-	<b>&gt; 80</b>

**MOOCs (SWAYAM online course)- 02 (Academic Writing; Industrial Pharmacy )**

**(developed and run; by UGC and CEC; PIONEER IN UNIVERSITY & PHARMACY; run in July session with more than 35000 learners from 95 countries. RANKED NUMBER #1 MOOC OF COUNTRY and ranked in TOP 30 MOOCs WORLDWIDE; available at [www.swayam.gov.in](http://www.swayam.gov.in) )**

**Highly cited researcher (*h index* 23)**