Curriculum Vitae

Mohammad Ashfaque

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Personal details:

Name: Mohammad AshfaqueFather's name: Mohammad Abbas

• **Date of birth:** 5th July,1982

• Languages known: English, Hindi and Urdu

Educational qualification:

Name of course/examination	Name of University/board	Year of passing
High school	U.P. Board	1996
Intermediate	U.P. Board	1998
B.Sc. Botany and Chemistry	Lucknow University	2001
M.Sc. Biochemistry	Allahabad Agricultural Institute	2005
	Deemed University	
Ph. D. (Biochemistry)	Integral University, Lucknow	2017

Ph. D. Topic: Microbial conversion of sugarcane baggase in to ethanol

Other Oualifications:

- ❖ Qualify General Course on Intellectual Property from WIPO worldwide academy (Oct 1 to Nov 15, 2007).
- ❖ Qualify **Primer on Intellectual Property** from WIPO worldwide academy.
- ❖ Qualify General Primers Introduction to the patent Cooperation Treaty from WIPO worldwide academy.

Work Experience:

- ❖ Worked as a **Research Associate** in an ICAR Networking project entitled as "National Agricultural Innovation Foundation (NAIF)" in Indian Institute of Sugarcane Research, Lucknow from February 03, 2018 to September 20, 2018.
- ❖ Worked as a **Research Associate** in an ICAR Networking project entitled as "National Agricultural Innovation Foundation (NAIF)" in Indian Institute of Sugarcane Research, Lucknow from March 18, 2011 to July 31, 2017.
- ❖ Worked as a Research Associate in an ICAR Networking project entitled as "Intellectual Property Management and Transfer/Commercialization of Agricultural Technology Scheme (Up-scaling of existing component i.e. Intellectual Property Rights (IPR) under ICAR Headquarters Scheme on Management and Information Services" in Central Institute for Subtropical Horticulture, Lucknow from Jul 09, 2009 to Jan 07, 2011.
- ❖ Worked as a **Senior Research Fellow** in an ICAR Networking project entitled as "Application of Microorganism in Agriculture and Allied Sector", sub theme as "Utilization of Waste for Value Added Product" in Central Institute for Subtropical Horticulture, Lucknow from Dec 11, 2006 to Jul 08, 2009.

* Have completed a project entitled "Production, Partial Purification and Characterization of Pectinase using Mango peel as Substrate" as part of the M.Sc. programme in the Microbiology Laboratory, Department of Post Harvest Management, Central Institute for Subtropical Horticulture, Lucknow.

Expertise:

Research:

- Protein purification
- **❖** Enzyme characterization
- Microbial enzyme production
- ❖ Bio-ethanol production
- ❖ Fermentation technology
- **❖** Soil analysis
- ❖ Food products analysis
- **&** Economic analysis

IPR:

- Drafting of patentable documents
- Drafting of techno-legal documents
- ❖ Prior art search
- Technology transfer

Awards:

- ❖ Awarded for **Top Honors** in **Marketing Skills** in a training programme held by Chandan Healthcare Limited on 21st to 25th March 2006.
- Awarded 2nd prize for Poster Paper Award for poster paper entitled "Production and Characterization of Extracellular Cellulases from Cellulolytic *Bacillus sp.* using mango peel as Substrate" by Neelima Garg, Devendra kumar and Mohammad Ashfaque in a national conference on Eco-friendly approaches in sustainable agriculture and horticulture production, held by Doctor's Agriculture and Horticulture Development Society, on 28-30th Nov, 2008.
- ❖ Awarded 3rd prize for oral presentation of paper entitled "Production of cellulase from mango peel residue left after pectin extraction using *Aspergillus niger*" by Neelima Garg, Devendra Kumar, **Mohammad Ashfaque** and Muthukumar M in National Seminar on Production, Post harvest Technology and Marketing of Mango held at TNAU, Periyakulum, September 23 − 25, 2009.
- ❖ Awarded 2nd prize for Poster Paper Award for poster paper entitled "Optimization of conditions for CMCase production through mango peel by *Trichoderma* sp." by Devendra kumar, **Mohammad Ashfaque**, Muthukumar M. and Neelima Garg in a National seminar on "Food security and economic prosperity through processing and preservation of foods" from 4 − 5th March, 2010.
- ❖ Awarded 1st prize for Poster Paper Award for poster paper entitled "Production, purification and characterization of a-amylase by *Fusarium* sp. using mango kernel as potential substrate" by Devendra kumar, **Mohammad Ashfaque**, Abhishek Shukla, Muthukumar M. and Neelima Garg in National Symposium on Conservation Horticulture held at Dehradun from 21-23rd March, 2010.
- ❖ Awarded 3rd prize in Art competition to finalize the Institute's logo held on October 10, 2011 at Indian Institute of Sugarcane Research, Lucknow.
- ❖ Awarded **various prizes** in competitions during *Hindi Pakhwara* held at Indian Institute of Sugarcane Research, Lucknow under different categories during 2012, 2013 and 2014.

Paper:

- ❖ Neelima Garg and **Mohammad Ashfaque.** (2010). Mango peel as substrate for production of extracellular polygalacturonase from *A. fumigatus* Indian Journal of Horticulture. 67 (1), 140 143.
- ❖ A. Pandey, M. Kamle, L.P. Yadava, M. Muthukumar, P. Kumar, V. Gupta, **Mohammad Ashfaque** and B.K. Pandey. (2010). Genetically Modified Food: Its uses, Future Prospects and Safety Assessments. Biotechnology. 9 (4) 444-458.
- ❖ A. Pandey, **Mohammad Ashfaque**, Deepti Arya, Apporv Saxena, Shuchi Choudhary and U.K. Chauhan. (2011). Lipid lowering and antioxidant activity of *Terminalia arjuna* in hyperlipemic rats. International Journal of Biotechnology and Biochemistry. 7 (1) 133 145.
- ❖ Brahm Prakash, Sharma, A.K., **Mohammad Ashfaque** and Srivastava, S. (2011). Improving agricultural marketing: A pre-requisite for ensuring food security of the country. Indian Journal of Agricultural Marketing 25 (3): 150-161.
- ❖ Devendra kumar, **Mohammad Ashfaque**, Muthukumar M., Munna Singh and Neelima Garg. (2012). Production and characterization of carboxymethyl cellulase from *Paenibacillus polymyxa* using mango peel as substrate. J. Environ Biol. 33, 81-84.
- ❖ D.N. Khan, P. Yadav, **Mohammad Ashfaque** and Neelima Garg. (2012). Study of osmotolerant yeast isolated from spoilde aonla segments in syrup. J. Ecofriendly Agriculture 7(2): 191 − 194.
- ❖ Ashutosh Pandey, **Mohammad Ashfaque** and Rupesh Kumar Mishra. (2013). *In vitro* antifungal activity of *Trichoderma* spp. against *Colletotrichum gloeosporioides* and their molecular characterization. Plant Archives 13 (1): 51-58.
- ❖ Mohammad Ashfaque, Sushil Solomon and Neelam Pathak (2013) Utilization of sugarcane baggase as substrate for production of extracellular CMCase and Cellulobiase from *Trichoderma* sp. Online International Journal of Biosolution 3 (2): 121 28.
- ❖ Mohammad Ashfaque, Sushil Solomon and Neelam Pathak (2014) Optimization of pretreatment and fermentation conditions for production of extracellular cellulase complex using sugarcane bagasse. Bioinformation 10(10): 606-610.
- ❖ Mohammad Ashfaque, Sushil Solomon and Neelam Pathak (2015) Kinetic Study of Immobilized Cellobiase Produced from Immobilized Wild-Type *Trichoderma longibrachiatum*. Sugar Tech: 1-7.
- ❖ Mohammad Ashfaque, Neelam Pathak and Sushil Solomon (2018) Exploitation of Pretreated Sugarcane Bagasse as Inexpensive Substrate for Enhanced Protein Production by *Saccaromyces cerevisae*. International Journal of Scientific and Engineering Research 7(1): xx.

Book/Book chapter

- ❖ Solomon, S., Jain, Radha, Chandra, A., Shukla, S.K., Lal, R.J., Venugopalan, Visha K., Nithya, K., Holker, S.K., Singh, M.R., Prakash, Brahm and **Ashfaque**, **Mohammad** (2014) Sugarcane: A voyage from sett to sweetener, Indian Institute of Sugarcane Research, Lucknow. 111p.
- ❖ Neelima Garg, V.K. Singh, M. Ashfaque and Jyoti Bajpai. Current status of IPR issues in Horticulture in book entitled "Protecting Intellectual Property in Life

Sciences" Edited by: Dominic Keating, Abha Agnihotri and Ajit Varma. pp - 197 - 204.

Brochure

❖ Sharma, A.K., Brahm Prakash, Sawnani, Anita and **Mohammad Ashfaque** (2012) Capacity building and advisory services in sugarcane R & D.

Souvenirs

- ❖ Jain, Radha, Rao, G.P., Shukla, S.K., Singh, S.N., Swapna, M., Nithya, K., Visha Kumari, V., Holker, S.K., **Ashfaque, Mohammad** and Prakash, Brahm (2014) The Power of Sugar Crops. Proceedings of International Conference on Sugar Crops: Sweeteners and Green Energy from Sugar Crops: Emerging Technologies, February 15 − 17, 2014, held at Indian Institute of Sugarcane Research, Lucknow, India. 205 p.
- ❖ Srivastava, S., Anwar, S.I., Verma, P., Kumar, D., Swapna, M., Singh, R.D., Prakash, Brahm, **Ashfaque**, **Mohammad** and Singh, A.K. (2014) Jaggery: Evolution to Revolution. Souvenir-cum-Proceedings, National Meet on Modernization of Jaggery Industry in India held on November 1-2, 2014, at ICAR-Indian Institute of Sugarcane Research, Lucknow, India. 193 p.

Symposium/ seminar/ training programme attended:

- ❖ Participated in one day seminar on "Intellectual Property Rights" organized by College of Biotechnology, Allahabad Agricultural Institute Deemed University, Allahabad on 3rd Sep, 2003.
- ❖ Participated in the National Training Programme on "Microbial Community Analysis through Metagenomics" organized by National Bureau of Agriculturally Important Microorganisms, Mau, UP from 3rd − 7th Feb 2007.
- ❖ Participated Horticulture Summit 2007 at Lucknow from 16th to 19th of June 2007.
- ❖ Attended National seminar on "Sustainable Horticulture Research in India: Perspective, Priorities and Preparedness" organized by Babasaheb Bhimrao Ambedkar University, Lucknow from 14th-15th Apr, 2008.
- ❖ Attended Training cum workshop on "Bioinformatics for beginners" organized Green Earth Research Foundation, Lucknow on 4th Apr, 2010.
- ❖ Attended National seminar on "Role of Intellectual Property Rights in Business Prospective" organized by Council of Science and Technology, Uttar Pradesh from 23rd May, 2011.
- ❖ Attended National seminar on "Protection & Importance of IPR for Artisans / MSME" organized by Council of Science and Technology, Uttar Pradesh from 17th October, 2011.
- ❖ Attended 25th National Conference on **Agricultural Marketing** held at National Academy of Agricultural Research and Management, Rajendra Nagar, Hyderabad on November 22-24, 2011.
- ❖ Attended a 2-days training programme on '**Drafting interpretation of Patent specification and claims**' at National Institute of Intellectual Property Management (NIIPM), Nagpur, held on 12th − 13th December, 2011
- ❖ Delivered lecture on ICAR three tier systems of Intellectual Property and Technology management and IPR to **FOCARS trainee scientists**, Miss V. Visha Kumari, Scientist (Agronomy) and Ms. Nithya. K Scientist (Plant Pathology) on 09th January, 2012.

- ❖ Attended Seminar on "Agribusiness potential of Bihar" held at RAU, Pusa, Samastipur on November 2-3, 2012.
- ❖ Attended Brain Storming Session on IP and TM Management held at Indian Institute of Sugarcane Research, Lucknow on November 24, 2012.
- ❖ Attended Training programme on Quality Management System as per ISO 9001:2008 Standards held on December 3, 2012 at Indian Institute of Sugarcane Research, Lucknow.
- ❖ Attended Seminar on Agribusiness Potential of Uttar Pradesh held at Bankers Institute of Rural Development, Lucknow on March 25-26, 2013.
- ❖ Attended National Conference on Women in Agriculture and Industry held at Indian Institute of Sugarcane Research, Lucknow on August 29-31, 2013.
- ❖ Attended Seventy second Annual Conference of the Indian Society of Agricultural Economics held at NAARM, Hyderabad during December 18 -20, 2013.
- ❖ Attended 27th Annual Conference of Agricultural Marketing held at UAS, Dharwad during December 18 -20, 2013.
- ❖ Attended International Conclave on Sugar Crops held at Indian Institute of Sugarcane Research, Lucknow on February 15-17, 2014.
- ❖ Attended awareness workshop on challenges and opportunities in Intellectual Property Management and Commercialization of Technologies in Fisheries and Agriculture Sectors held on 20 March, 2014 at National Bureau of Fish Genetic Resources, Lucknow.
- ❖ Attended 2nd UP Agricultural Science Congress on "Technological and governance strategies for advancement of agricultural education, research and extension in Uttar Pradesh" held on June 14 − 16, 2014 at Indian Institute of Sugarcane Research, Lucknow.

Popular article/Published abstract/Poster presented:

- ❖ Neelima Garg and Mohammad Ashfaque. Production and Characterization of Extracellular Pectinases from Aspergillus sp. Using Mango Peel as Substrate. Second Horticulture Congress 2007, Barapani, Meghalaya. 18th- 21st Apr, 2007. p. 284-285.
- ❖ Neelima Garg, **Mohammad Ashfaque** and Preeti Yadav.2007. Alcohal Kinvan: Fal Sanrakshan Ki Upyogi Vidha, Udyan Rashmi 8(1, 2):10-14.
- ❖ Neelima Garg, Danish Nasar Khan, Preeti Yadav and **Mohammad Ashfaque**. Study of Osmotolerent Yeast Isolated from Spoiled Aonla Fragments in Syrup. Food safety and Quality, Department of Food Technology, guru Jambheshwar University of Science and Technology, Hisar, on 20-21st Oct, 2008. p. 336.
- ❖ Neelima Garg, Devendra kumar and **Mohammad Ashfaque**. Production and Characterization of Extracellular Cellulases from Cellulolytic *Bacillus sp.* Using mango peel as Substrate. Eco-friendly approaches in sustainable agriculture and horticulture production, Doctor's Agriculture and Horticulture Development Society, on 28-30th Nov, 2008.p. 184.
- ❖ Neelima Garg, Mohammad Ashfaque and Devendra kumar. Production of Amylase using mango kernel as corbon source by different amylolytic microbial isolates. 3rd Indian Horticulture Congress, Bhubaneshwar, 6th − 9th Nov, 2008.
- ❖ Neelima Garg, Devendra kumar and **Mohammad Ashfaque**. Production and Characterization of Extracellular Cellulases from Cellulolytic *Bacillus sp.* Using

- mango peel as Substrate. In a national conference on Eco-friendly approaches in sustainable agriculture and horticulture production, held by Doctor's Agriculture and Horticulture Development Society, on 28-30th Nov, 2008.
- ❖ Devendra kumar, **Mohammad Ashfaque**, Muthukumar M. and Neelima Garg. Production of Cellulases from through fermentation using mango peel as substrate. In a national conference held at TNAU, Periyakulum during 2009.
- ❖ Devendra kumar, **Mohammad Ashfaque**, Muthukumar M. and Neelima Garg. "Optimization of conditions for CMCase production through mango peel by *Trichoderma* sp." in a National seminar on "Food security and economic prosperity through processing and preservation of foods" held at CIAE, Bhopal from 4 − 5th March, 2010.
- ❖ Devendra kumar, **Mohammad Ashfaque**, Muthukumar M. and Neelima Garg. "Optimization of conditions for amylase production using mango kernel by *Fusarium* sp." in a National seminar held at FRI, Dehradun during 2010.
- ❖ Devendra kumar, **Mohammad Ashfaque**, Muthukumar M. and Neelima Garg. "Extraction and characterization of oil from mango kernel cv. mallika" in a National seminar held at FRI, Dehradun during 2010.
- ❖ Neelima Garg, Priti Yadav, D.K. Shukla, Sanjay Kumar, **Mohammad Ashfaque**, Devendra kumar and Jyoti Bajpai. "Improved Protocol for Development of mango wine" in a National Seminar on Biodiversity in Mango for Sustainable livelihood, held on Central Institute for Subtropical Horticulture, Rehmankhera, Lucknow from 25-28th June, 2010.
- ♦ Mohammad Ashfaque, Jyoti bajpai, Muthukumar M., Neelima Garg and H. Ravishankar. "Biodiversity, sustainable livelihood options and IP Protection" in a National Seminar on Biodiversity in Mango for Sustainable livelihood, held at Central Institute for Subtropical Horticulture, Rehmankhera, Lucknow from 25-28th June, 2010.
- ❖ Brahm Prakash, Sharma, A.K., Mohammad Ashfaque and Singh, Rakesh K. (2011). Revamping MGNREGES in the twelfth plan: Implications from village level implementation status in the Central Uttar Pradesh. Paper presented at the 71st Annual Conference of the Indian Society of Agricultural Economics held at UAS, Dharwad during November 3-5, 2011, Abstract in Indian Journal of Agricultural Economics 66 (3): 317-318.
- ❖ Brahm Prakash, Sharma, A.K., Mohammad Ashfaque and Srivastava, S. (2011). Improving agricultural marketing: A pre-requisite for ensuring food security of the country. Paper presented at the 25th Annual Conference of Agricultural Marketing held at NAARM, Hyderabad during November 22-24, 2011, Abstract in Summaries of the accepted papers. pp. 24-25.
- ❖ Brahm Prakash, Sharma, A.K. and **Mohammad Ashfaque** (2012) Agribusiness Potential of Fruits and Vegetables Processing in Bihar. Paper presented in Seminar on "Agribusiness potential of Bihar" held at RAU, Pusa, Samastipur on November 2-3, 2012.
- ❖ Brahm Prakash, Sharma, A.K., Mohammad Ashfaque and Srivastava, S. (2013) Immense potential of agribusiness of guar gum in Rajasthan. Paper presented at National Seminar on Agri Business Potential of Rajasthan held at S.K. Rajasthan Agricultural University, Bikaner on March 19-20, 2013. In: Proceedings (Ed. Sharma, R., Sharma, M., Sharma, S.K., Sharma, Shanti Kumar, Mathur, Aditi, Sharma, A., Itreja. S., Sharma, S. and Solanki, Priyanka) pp. 65-80.

- ❖ Ashfaque, Mohd., Brahm Prakash and Sharma, A.K. (2013) Bhartiya Paridrashya Mein Boddhik Sampada Adhikar. Ikshu 2(1): 44-45.
- ❖ Brahm Prakash, Sharma, A.K. and **Ashfaque**, **Mohd**. (2013) *Manav Bhojan Mein Protein Ka Mahatva*. *Ikshu* **2**(1): 77-79.
- ❖ Brahm Prakash, Sharma, A.K., **Mohammad Ashfaque** and Srivastava, S. (2013) Immense potential of agribusiness of guar gum in Rajasthan. Paper presented at National Seminar on Agri Business Potential of Rajasthan held at S.K. Rajasthan Agricultural University, Bikaner on March 19-20, 2013. 88p.
- ❖ Brahm Prakash, Singh, G.K., Sharma, A.K. and **Mohammad Ashfaque**. (2013) Vast potential for food processing in Uttar Pradesh. Paper presented at Seminar on Agribusiness Potential of Uttar Pradesh held at Bankers Institute of Rural Development, Lucknow on March 25-26, 2013.
- ❖ Singh, R.K., Sharma, A.K., Brahm Prakash and **Mohammad Ashfaque** (2013) Agribusiness potential of potato in Uttar Pradesh. Paper presented at Seminar on Agribusiness Potential of Uttar Pradesh held at Bankers Institute of Rural Development, Lucknow on March 25-26, 2013.
- ❖ Brahm Prakash, Sushila Srivastava, D.K. Sharma, Sharma, A.K. and **Mohammad Ashfaque**. (2013) Potential of agribusiness through Mini Dal Mills in Uttar Pradesh. Paper presented at Seminar on Agribusiness Potential of Uttar Pradesh held at Bankers Institute of Rural Development, Lucknow on March 25-26, 2013.
- ❖ Mohammad Ashfaque, Sushil Solomon and Neelam Pathak (2013) Fermentation of sugarbeet pulp to cellulase and its partial characterization. In IISR-Industry Interface on Research and Development Initiatives for Sugarbeet in India held at Sugarbeet Breeding Outpost of IISR, IVRI Campus, Mukteswar, Nainital on May 28-29, 2013.
- ❖ Brahm Prakash, Sharma, A.K. and **Mohammad Ashfaque** (2013) Rural nonfarm sector: An additional source of income for female sugarcane workers. Paper presented at National Conference on Women in Agriculture and Industry held at Indian Institute of Sugarcane Research, Lucknow on August 29-31, 2013. Abstract: In Proceedings. pp. 180.
- ❖ Singh, Neelam, Brahm Prakash, **Mohammad Ashfaque** and Sharma, A.K. (2013) Jaggery: A cheap and reliable source of home remedy practiced in ailments by elderly rural women since time immemorial. Paper presented at National Conference on Women in Agriculture and Industry held at Indian Institute of Sugarcane Research, Lucknow on August 29-31, 2013. Abstract: In Proceedings. pp. 220-221.
- ❖ Sharma, A.K., Solomon, S.,Brahm Prakash, **Mohammad Ashfaque** and Singh, Neelam (2014) Sugar production and consumption scenario in 21st century. Paper presented in the International Conclave on Sugar Crops on "Sweeteners and Green Energy from Sugar Crops: Emerging Technologies" held at Indian Institute of Sugarcane Research, Lucknow on February 15-17, 2014. p. 196-197.
- ❖ Mohammad Ashfaque, Sushil Solomon and Neelam Pathak (2014). Effect of immobilization on Cellulobiase activity produced from immobilized *Trichoderma* spp. using sugarcane bagasse as substrate. In International Conference on Sugar Crops & National SugarFest 2014 'Sweeteners and Green Energy from Sugar Crops: Emerging Technologies' held at Indian Institute of Sugarcane Research, Lucknow on February 15 17, 2014.
- ❖ Mohammad Ashfaque, Brahm Prakash and Sharma, A.K. (2014) IPR system in ICAR: Experiences and lessons. Paper presented in 2nd UP Agricultural Science

- Congress on Technological and Governance Strategies for Advancement of Agricultural Educaion, Research and Extension held at Indian Institute of Sugarcane Research, Lucknow on June 14-16, 2014. In: Souvnir and Abstracts p. 409.
- ❖ Mohammad Ashfaque., Brahm Prakash and Sharma, A.K. (2014) IP status of jaggery Trends, constraints and prospects. Paper presented at National Meet on Modernization of Jaggery Industry in India held on November 1-2, 2014, at ICAR-Indian Institute of Sugarcane Research, Lucknow, India. In: Jaggery: Evolution to Revolution. Souvenir-cum-Proceedings of the National Meet on Modernization of Jaggery Industry in India, p. 123.
- Singh, N., Brahm Prakash, Sharma, A.K. and **Mohammad Ashfaque** (2014) Medicinal properties of jaggery. Paper presented at National Meet on Modernization of Jaggery Industry in India held on November 1-2, 2014, at ICAR-Indian Institute of Sugarcane Research, Lucknow, India. In: Jaggery: Evolution to Revolution. Souvenir-cum-Proceedings of the National Meet on Modernization of Jaggery Industry in India, p. 127-128.
 - ❖ Brahm Prakash, Sharma, A.K., **Mohammad Ashfaque** and Pant, D.C. (2014) Export potential of jaggery in India. Paper presented at National Meet on Modernization of Jaggery Industry in India held on November 1-2, 2014, at ICAR-Indian Institute of Sugarcane Research, Lucknow, India. In: Jaggery: Evolution to Revolution. Souvenir-cum-Proceedings of the National Meet on Modernization of Jaggery Industry in India, p. 133.
 - ❖ Brahm Prakash, A.K. Sharma and **Mohammad Ashfaque** (2014) Immense scope for women in sugarcane based cottage industries. Paper presented at the Twenty Seventh Annual Conference of the Indian Society of Agricultural Marketing held at Agro-Economic Research Centre, Sardar Patel University, Vallabh Vidyanagar, Anand during December 4-6, 2014. Abstract in Indian Journal of Agricultural Marketing 28 (3): 100.
 - ❖ A.K. Sharma, Brahm Prakash and **Mohammad Ashfaque** (2015) Problems and prospects of mechanization in labour intensive sugarcane crop in India. Paper presented at the XII Agricultural Science Congress held at National Dairy Research Institute, Karnal during February 3-6, 2015. Abstract in Compendium pp. 255-256.

Patents applied:

- ❖ Patent Number: 510/DEL/2011 A biscuit composition enriched with dietary fiber extracted from mango processing waste of finisher stage and a process for preparation of the same. (Published in official Journal of Indian Patent Office: on 25th March, 2011 pp 5187)
- ❖ Patent Number: 511/DEL/2011 A low energy process for extraction of fiber from mango processing waste of finisher stage. (Published in official Journal of Indian Patent Office: on 25th March, 2011 pp 5191)

Place:	(Mohammad Ashfaque)
Date:	