# **BIO-DATA**

RENU CHUGH Professor and Former Head Department of Mathematics Maharshi Dayanand University Rohtak-124001 (Haryana), INDIA



Name	Renu Chugh
Date of Birth	08-12-1962
Designation and Post Held	<ul> <li>Head, Department of Mathematics, M. D. University, Rohtak from 01-05-2010 to 30-04-2013.</li> <li>Director Research, M. D. University, Rohtak from 05-10-2016 to till date.</li> <li>Chairperson of the Committee to Check the Menace of Sexual Harassment and Violence against Women at Workplace from 01-01-2015 to till date.</li> </ul>
Home Address & Address for Correspondence	172-R Model Town Rohtak-124001 Mobile: +91-9991132199, +91-9215843233 Email-id: <a href="mailto:chughr.1@gmail.com">chughr.1@gmail.com</a> , <a href="mailto:chughrenu1988@gmail.com">chughrenu1988@gmail.com</a>
Academic Qualification	M.Phil., Ph.D. (Mathematics)
Research Experience	34 years
Teaching Experience	32 years
Research Interests	Approximation Theory, Fixed Point Theory, Non-Linear Analysis, Fuzzy Mathematics, Theory of Frames, Fractals and Chaos, Functional Equations
Research Guidance	Ph. D Students Supervised: 26 Ph. D. Students Supervising: 07 M. Phil. Students Supervised: 32 Post-Doctoral Fellow Guided: 02
Research Publications	Published in Refereed/Peer reviewed Journals: 179 Published in Conference/ Seminar Proceedings: 10
Research Grants	<ul> <li>Principal Investigator of Major Research Project from UGC entitled "Non-linear Functional Analysis and Applications: Fuzzy and probabilistic approach" for 3 years (2011-14) (Rs. 8,87,000/-)</li> <li>Co-ordinator, (DRS-I, Department of Mathematics) under Special Assistance Program of University Grants Commission (2012 to till date).</li> </ul>

#### **Awards & Honours:**

- Received prestigious "INSA Teachers Award 2017" on 29<sup>th</sup> December 2017 by Indian National Science Academy in IISER Pune.
- Selected as one of #100 Women Achievers of India in the category of education by Ministry of Women and Child Development, Government of India and felicitated by Hon'ble President Shri Pranab Mukherjee on 22nd January 2016.
- Received "National Teacher Award" on the eve of "Teacher's Day" on 4<sup>th</sup> September 2018, by Anti Corruption Foundation of India.
- Received "IARDO Award for Excellence- 2018" by International Association of Research and Developed Organization in association with Gurukul Institute of Engineering & Technology, Kota on the occasion of International Award Conference on Multidisciplinary Research and Latest Innovation on 28<sup>th</sup> October, 2018.
- Received "IAA India Education Award 2018" for Outstanding Contribution to Women's Technical Education by International Accrediting Authority on 13<sup>th</sup> January, 2018.
- Received "Empowered Women Developed Society Award" by Hon'ble Chief Minister of Haryana, Sh. Manohar Lal Khattar on the occasion of "Changing Haryana- Growing Haryana" on 12th August, 2016.
- Received "Women of the Future Award 2017" in Jaipur on 23<sup>rd</sup> September, 2017.
- Selected amongst 100 Women Mathematicians from all over the World to receive Travel Grant from Organizers of (ICM-2014) International Congress of Mathematicians at Seoul, South Korea.
- Received award "Empowering Women, Empowering Humanity" on 17<sup>th</sup> November, 2016 organized by Haryana Police, Rohtak.
- Received certificate of Honour by Sashakt Mahila Parishad, Rohtak in recognition of best services in the field of Education and Social Cause on International Educational Women's Day 8<sup>th</sup> March, 2018.
- Received certificate of honour on 23-03-2012 by PGIMS Rohtak and Haryana Blood Transfusion Council, Panchkula for organizing Blood and Eye Donation Camp in Dept. of Mathematics National Science Day.
- Received "Hindustan Gaurav Samman" on 8th May, 2016.

### **Workshops/Conferences organized:**

- **Convener,** Workshop on "Women Safety and Gender Sensitization at Workplace" in M. D. University, Rohtak (22-03-2018).
- Organized one day Workshop on "Youth Against Sexual Harassment (YASH)" in collaboration with Women Police Station, Rohtak for the girls student in the girls' hostel complex, M. D. University, Rohtak (05-05-2017).
- Coordinator, "National Seminar on Recent Developments in Mathematical Sciences", Department of Mathematics, Maharshi Dayanand University, Rohtak (March 07-08, 2017).
- Convener, Workshop on "Gender Sensitization and Women Safety at Workplace" in M. D. U niversity, Rohtak (16-02-2017).
- Organized two days Workshop on "Women Safety & Self Defense Techniques" in collaboration with Women Police Station, Rohtak for the girls' student in the girls' hostel complex, M. D. University, Rohtak (11-12 August, 2016).

- **Convener,** Workshop on "Gender Sensitization and Women Safety at Workplace" in M. D. U niversity, Rohtak (09-10 Feb, 2016).
- **Convener**, Workshop on "Sexual Harassment and Violence against Women: Prevention, Prohibition & Redressal" in M. D. University, Rohtak (26-02-15 and 17-03-15).
- Convener, International Conference on History and Development of Mathematical Sciences (ICHDMS-2012), Department of Mathematics, M. D. University, Rohtak in collaboration with "Indian Society for History of Mathematics" (21-11-12 to 24-11-12). More than 450 participants (including 38 from abroad) attended the conference.
- Organizing Secretary, National Conference on History of Mathematics and Recent Developments, Department of Mathematics, Maharshi Dayanand University, Rohtak (20-12-06 to 22-12-06).
- Convener, Symposium on Non-Linear Analysis, International Colloquium on History of Mathematical Sciences and Symposium on Non-Linear Analysis, SSJ Campus Almora (16-05-11 to 19-05-11).
- Organizer, Blood and Eye Donation Camp in the Department of Mathematics, M. D. University on 28-02-2011 to celebrate National Science Day. 128 units of blood was collected in the camp. An appreciation certificate was received for organizing the camp from PGIMS, Rohtak and Red Cross Society.

#### **Public talks & Outreach activities:**

- Delivered Guest lecture on the topic "Women Safety at Workplace" in Post Graduate Institute of Dental Sciences, Rohtak (22-11-2018).
- Chief Guest and addressed students on the occasion of "Ozone Day Celebration" organized by 'Environmental Sustainability Management (ESM) Cell, M. D. University, Rohtak (15-09-2018).
- Chief Guest and addressed students in the Workshop on "Submission of Research Projects" organized by Dept. of Education, M. D. University, Rohtak (21-04-2018).
- Delivered lecture on the topic "Gender Sensitization in Classrooms" under Women cell of the Department of the Education M.D. University, Rohtak (13-04-2018).
- Delivered lecture on "Laws Related to Working Women" in Legal Awareness Programme organized by Haryana Mahila Ayog in Kishori College, Rohtak (30-03-2018).
- Delivered lecture on **Beti Bachao Beti Padhao and Cleanliness** in NSS Seven Days Camp in village Baniyani organized by M.D. University, Rohtak (23-03-2018).
- **Guest of Honour** and addressed the participants in Youth Red Cross Camp organized by M. D. University on 08-03-2018 (International Women's Day).
- Delivered lecture in Blood Donation Camp organized by NSS M.D.U., Rohtak (16-02-2018).
- Guest of Honour and delivered talk on "Gender Sensitization and Women Safety" in the workshop Women Security/Self Defence and Beti Bachao Beti Padhao organized by Youth Red Cross, M. D. University, Rohtak (30-10-2017).
- Chief Guest and addressed students in DCSA TechnoFusion Fest 'Udaan'-17 organized by Dept. of Computer Science, M. D. University, Rohtak (18-09-2017).
- Delivered lecture on "Gender Sensitization and Role of Education" in C. R. Polytechnic College, Rohtak (30-08-2017).

- **Chief Guest** in Valedictory session and delivered talk in one week National Yoga Workshop cum Training from 15-06-2017 to 21-06- 2017.
- Delivered talk on "Sexual Harassment and Violence against Women at Workplace" in Youth Red Cross, M. D. University, Rohtak (20-06-2017).
- Delivered talk on "Sexual Harassment and Violence against Women at Workplace: Prevention, Prohibition & Redressal" in Department of Pharmaceutical, M. D. University, Rohtak (20-04-2017).
- Delivered Radio Talk on "Status of Women: Challenges and Achievements" on International Women's day in **Naari Jagat Programme** (08-03-2017).
- Guest of Honour and addressed students in National Conference on "Emerging Trends in cloud Computing & Big Data Analytics, ETCCBDA-17" organized by Dept. of Computer Science, M. D. University, Rohtak (06-03-2017).
- Participated as **speaker** in the panel of the talk show on "The Social, Psychological & Legal Aspects of Sexual Harassment" organized by K.R. Mangalam University, Gurgaon (24-11-2016).
- Delivered talk entitled "Women Safety & Sexual Harassment at Workplace" in the workshop "Empowering Women, Empowering Humanity" organized by Haryana Police, Rohtak (17-11-2016).
- Delivered talk on "Sexual Harassment and Violence against Women at Workplace: Prevention, Prohibition & Redressal" in BPSMV, Khanpur Kalan, Sonipat (26-10-2016).
- Delivered lecture on 'Gender Sensitization' in NSS Seven Days Camp (22- 27, October, 2016) organized by All India Jat Heroes Memorial College, Rohtak (26-10-2016).
- **Guest of Honour** and addressed students in Maths quiz organized by All India Jat Heroes Memorial College, Rohtak (16-09-2016).
- Delivered talk on "Swachh Bharat Abhiyan" in the Workshop -"Training & Development in Hospitality & Tourism Industry: Opportunities & Challenges" organized by IHTM, M. D. University (15-09-2016).
- Participated in one hour discussion on "**Khabar Fast**" T.V. channel on the topic "Mahila Suraksha" (18-07-2016).
- Delivered talk on "Work Hard, Dream Big" in Youth Red Cross Camp organized by M. D. University (28-06-2016).
- Delivered Radio Talk on "Awareness regarding violence against women" (08-06-2016).
- Delivered Radio Talk on International Women's day and women safety in **Naari Jagat Programme** (06-03-2016).
- Guest of Honour and motivated students and villagers about Moral values and National Integrity on Republic Day -2016 organized by Roshni Manav Sewa Sanstha approved by Govt. of India, VPO Dighal, Jhajjar (26-01-2016).
- **Guest of Honour** and delivered lecture on **Female foeticide** in NSS Seven Days Camp 2015-16 organized by Pt. N. R. S. Govt. College, Rohtak (27-01-2016).
- Delivered lecture on 'Beti Bachao, Beti Padhao & Moral Values' in NSS Seven Days Camp (25- 31 January, 2016) organized by All India Jat Heroes Memorial College, Rohtak (29-01-2016).
- Chief guest and delivered lecture on Women rights in "Utsav-2016 Inter-college Competition" organized by Govt. College for Women Rohtak (18-02-2016).
- **Chief guest** and delivered lecture on **Female Education** in the programme on the eve of International Women's day organized by Youth India Association (07-03-2016).

- Chief guest and delivered lecture on "Be the Change You Wish to See in the World" in the function organized by Women Development Cell, Rajdhani College, Delhi University (15-03-2016).
- Delivered lecture on "Women Empowerment" in Youth Red Cross Camp organized by All India Jat Heroes Memorial College, Rohtak (16-03-2016).
- Delivered Radio Talk on the Topic "Women Harassment & Gender Sensitization" in All India Radio Rohtak Station, Rohtak (25-05-2015).

#### **Professional Activities & Committees:**

## **University Grants Commission (UGC):**

- Appointed as expert in various Expert committees towards the evaluation and assessment of the research papers submitted by college Teachers concerning travel assistance to attend International Conferences abroad by **University Grants Commission**.
- Appointed as expert member of assessment/ review committee for final review of the Special Assistance Programme (SAP) at the level of DSA, Phase- IV of Department of Mathematics, Pune University, Pune by **University Grants Commission**.
- Appointed as **UGC observer** by **University Grants Commission** in various selection committees for promotion from Reader to Professor under Career Advancement Scheme.
- Appointed as subject expert member of the expert committee to select candidates under the scheme for post doctoral fellowship for SC/ST by **University Grants Commission**.
- Appointed as subject expert member, NET Review Committee by University Grants Commission.
- Appointed as member of the expert committee to evaluate their performance and academic
  autonomous status to Christian Eminent Academy of Management, Professional Education
  and Research, Indore (MP) by University Grants Commission.
- Appointed as member of the subject expert committee for screening the proposals under innovative program by **University Grants Commission**.
- Appointed as expert member to assess the performance of Shree Mata Vaishno Devi University, Katra during X plan and to evaluate its requirement for XI plan by **University Grants Commission**.
- Appointed as member expert committee for the evaluation of proposals from college teachers for undertaking Minor Research project at Kolkata and Delhi by University Grants Commission.
- Appointed as member of expert committee to examine the proposals received from the Colleges affiliated to University of Delhi to seek financial assistance from UGC to organize Seminars/Workshops/Conferences as per UGC XI plan Guidelines of the Scheme by University Grants Commission.

## **Universities:**

• **Member, P. G. Board of Studies**, Department of Mathematics, YMCA University, Faridabad (2018 to 2020).

- **Member, P. G. Board of Studies**, Department of Mathematics, Devi Lal University, Sirsa. (2017 to 2019).
- **Member, P. G. Board of Studies**, Department of Mathematics, Indira Gandhi University, Mirpur, Rewari (2014 to 2016).
- **Member, P. G. Board of Studies**, Department of Mathematics, CRS University, Jind (2015 to till date).
- Member, Court, Bhagat Phool Singh MahilaVishavidyalya, KhanpurKalan (2009 to 2010).
- **Member, U. G. Board of Studies**, Department of Mathematics, Devi Lal University, Sirsa (2013-15 and 2017 to 2019).
- Member, P. G. Board of Studies, Department of Mathematics, GJU S & T, Hisar.
- **Member-Expert,** Board of Research Studies for the School of Basic & Applied Sciences in Central University of Jammu, Jammu (2013-14).
- **Member, U. G. Board of Studies**, Bhagat Phool Singh MahilaVishavidyalya, Khanpur-Kalan (2009-11).
- Member, U. G. Board of Studies, Kurukshetra University, Kurukshetra.
- Member, P. G. Board of Studies, ITM University, Gurgaon (2010-11)

# Maharshi Dayanand University:

- **Director Research**, M. D. University, Rohtak (05-10-2016 to till date).
- Chairperson of the Committee to check the Menace of Sexual Harassment and Violence against Women at Workplace (01-01-2015 to till date).
- Member, Court, M. D. University, Rohtak (2015-17).
- Member, Admission Committee, M. D. University (2012-14).
- Member, Board of Residence, Health and Discipline. M. D. University, Rohtak.
- Convener and Member, UMC Committee, M. D. University for the sessions 2001-2002, 2010-2011, 2012-2013, 2014-15, 2016-17.
- Member, Alumni Advisory Committee, M. D. University.
- Subject Expert and VC Nominee in various Selection Committees.
- Member of various Inspection Committees for the inspection of colleges affiliated to M.D. University, Rohtak.

# **Member of Editorial Boards of the following Journals:**

- ➤ Journal of Non-linear Sciences and its Applications (2010-15).
- ➤ Journal of Non-linear Analysis and its Applications (2010 to till date).
- Mathematical Journal of Interdisciplinary Sciences (2012 to till date).

## **Society Memberships:**

- > Member, Executive Council of Indian Society for History of Mathematics (2006 to till date)
- **Life Member** of Indian Mathematical Society.
- ➤ **Member** Executive Committee of Indian Society for Industrial and Applied Maths.

#### **Referee Work:**

Refereed papers for the following Journals:

- Fillomat
- Hacettpe Journal of Mathematics and Statistics
- Journal of Advanced Math. Studies
- Southeast Asian Bulletin of Mathematics
- Journal of Natural Sciences
- Journal of Mathematical Sciences
- Fixed Point Theory and Applications
- Mathematica Vesnik
- The Journal of Advanced Topology
- Journal of Non-linear Analysis and its Applications
- Mathematical Journal of Interdisciplinary Sciences

## **Invited Talks/Paper Presented:**

- **Two Extension Lectures** on "Mathematics & Nature" and "Functional Analysis & Topology" in Department of Mathematics, Strex University Gurugram (11-10-2018).
- Extension Lecture on "The Beauty of Mathematics" in Department of Mathematics, Amity University Gurugram (11-10-2018).
- Extension Lecture on "Mathematics & Nature" in Department of Mathematics, CDLU, Sirsa (21-09-2018).
- Extension Lecture on "Beauty of Mathematics in Nature" in one day "Orientation Cum Seminar" organized by Department of Mathematics, YMCA University of Science & Technology, Faridabad (14-09-2018).
- **Presented** paper entitled "On Some Stability and Convergence Aspects of Logistic Map Using Iterative Procedures" in "The 10th Asian Conference on Fixed Point Theory and Optimizations (ACFPTO2018)" at Chiang Mai University, Chiang Mai Thailand (July 16-18, 2018).
- Invited talk and Chief Guest in Valedictory session in "International Conference on Recent Advances in Mathematics (ICRAM-2018)", Aggarwal College, Ballabgarh (February, 17-18, 2018).
- Chief Guest in Valedictory session in National Seminar on Recent Developments in Mathematics (NSRDM-2017), 12-13 January, 2017, Department of Mathematics, Kalindi College, Delhi University (13-01-2017).
- Chaired session in 3<sup>rd</sup> International Conference on Recent Developments in Science, Engineering & Technology, REDSET-2016, 21-22 Oct. 2016, G.D. Goenka University, Gurgaon (22-10-2016).
- **Invited talk** on "Fixed Point Theory & Application" in Faculty Development Program, Chandigarh University, Chandigarh (13-07-2016).
- **Invited talk** on "Introduction to Fractals and Chaos" in International Conference on Mathematics for Brain Studies", Noida International University, Gautam Budha Nagar (01-02-2016).

- Invited talk on "Fuzzy Sets and Fuzzy Logic: Its Applications" in International Conference on the occasion of Silver Jubilee of Indian Society of Industrial and Applied Mathematics (ISIAM) at Sharda University, Greater Noida, Delhi (31-01-2016).
- **Invited talk** on "Mathematical Environment of Fuzzy systems and Fractals" in National conference on Recent Development in Mathematical Modelling and Fuzziology, Department of Mathematics Chandigarh University, Chandigarh. (28-10-15 to 29-10-15)
- **Invited talk** on "A Panorama of Fractals and Chaos" in Annual Conference of Jammu Mathematical Society, Jammu University, Jammu (14-05-2015 to 16-05-2015).
- **Keynote address** on "Mathematics Everywhere" in International Seminar on "Sustainable Development in 21<sup>st</sup> Century: A Global Perspective", Chaudhry Ranbir Singh University, Jind (19-03-15 to 21-03-15).
- **Invited talk** on "Fuzzy Mathematics: Aspects of Vagueness" in National Conference on Emerging Trends in Mathematical Sciences, Department of Mathematics, Ch. Devi Lal University, Sirsa (17-03-15 to 18-03-15).
- **Keynote address** on "A Panorama of Fractals and Chaos" in International Conference on Innovative Trends in Computing Technology and Mathematica (ITCTM-2015), Delhi Institute of Technology and Management, Gannaur, Sonepat (14-03-15).
- Delivered **Extension lecture** on "Mathematics: The Crest of a Peacock", Ch. Ranbir Singh University, Jind (24-02-15).
- **Keynote address** on "Mathematics in Nature" in National Conference on Recent Advances in Mathematics (NCRAM-2015), Aggarwal College, Ballabgarh (20-02-15 to 21-02-15).
- Acted as **Chairperson** in National Conference on Recent Advances in Mathematics (NCRAM-2015), Aggarwal College, Ballabgarh. (20-02-15 to 21-02-15)
- Delivered **lecture** on "Career in Mathematics" in the Career Guidance Workshop, Shiksha Bharti School, Rohtak (05-02-15).
- **Invited talk** on "Mathematical Environment of Fuzzy set theory" in International Conference on Emerging Areas of Mathematics for Science and Technology, Panjabi University, Patiala (30-01-2015 to 01-02-2015).
- Acted as Chairperson in International Workshop on Wavelets, Frames and Applications (IWWFA-14), Department of Mathematics, Kirori Mal College, University of Delhi, Delhi (December 24-30, 2014).
- Delivered **lecture** on "Beauty of Mathematics with Medals" during DST Inspire programme, Om Institute of Engineering and Technology, Hisar (26-12-14).
- Delivered **Extension lecture** on "Mathematics: The Crest of a Peacock", University Campus School, Rohtak (22-12-14).
- Delivered **Extension lecture** on "Mathematics and its History", Model School, Rohtak (19-12-14).
- Acted as **Chairperson**, **Resource Person** and Delivered talk on "Iterative Algorithms for Nonlinear Operators" in International Conference on Algebra, Geometry, Analysis and their Applications (**ICAGAA-14**), Jamia Millia Islamia (27-11-2014 to 28-11-2014).
- Delivered **Extension lecture** on "Beauty of Mathematics", Central University of Haryana, Mahendargrah (25-11-14).
- Delivered **Extension lecture** on "Beauty of Mathematics with Medals", Ch. Devi Lal University, Sirsa (30-09-14).
- Participated in **International Congress of Women Mathematicians -2014** at Coex, Seoul, Korea on August 14, 2014.

- Received travel grant of 120,00,00 ₩ from NANUM to attend International Congress of Mathematicians 2014 at Coex, Seoul, Korea on August, 13-21, 2014 and presented paper entitled "A new approach to study the variants of Cantor sets".
- **Invited talk** on "The Beauty of Fractals" in National Conference on Advances in Mathematical Sciences and their Applications, Hindu Girls College, Sonipat (March 28-30, 2014).
- **Invited talk** on "Some aspects of Stability of Functional Equations" in International Seminar on History of Mathematics, Ramjas College, University of Delhi (27-11-13 to 28-11-13).
- **Invited talk** on "Mathematical Environment of Fuzzy Set Theory" in International Conference on Recent Trends in Materials and Devices, 2013, Amity University, Noida (30-10-13 to 31-10-13).
- Delivered **Extension lecture** on "Mathematics: The Crest of a Peacock", Vaish College, Rohtak (29-10-13).
- Delivered **Extension lecture** on "Fractals and Chaos", Ch. Devi Lal University, Sirsa. (20-09-13).
- Delivered **Extension lecture** on "Fractals and Nature", Hindu Girls' College, Sonipat (10-04-13).
- Delivered **lecture** on "Development in Mathematics" during DST Inspire programme, KIIT Engineering College Gurgaon (21-12-12).
- Delivered **Radio Talk** in Yuvvani Program, All India Radio Rohtak Station, Rohtak (10-10-2012).
- Delivered **lecture** on "The Beauty of Mathematics" in National Seminar on Mathematics and its Applications, Vaish College Rohtak (27-03-12 to 28-03-12).
- **Keynote address** on "Mathematics and Nature" in National Conference on Recent Developments in Mathematics with their Applications, Govt. College (Women), Bhoria Kalan, Fatehabad (Haryana) India (14-03-12 to 15-03-12).
- Delivered **lecture** on "Mathematics: History, Developments and Future outlook" in National Seminar on Recent Advances in Mathematics, Tika Ram P. G. Girls College, Sonipat (14-03-12 to 15-03-12).
- **Keynote address** on "Mathematics: The Crest of a Peacock" in National Seminar on Recent Developments in Mathematics and its Applications, Govt. Post Graduate College, Gurgaon (03-02-12).
- Delivered **lecture** on "Some Fixed Point Iteration Techniques" in National Seminar on Advanced in Mathematics: Historical Developments & Engineering Applications, Madhuben & Bhanubhai Patel Women's Institute of Engineering New Vallabh Vidyanagar, Gujarat (09-01-12 to 11-01-12).
- Acted as **Chairperson** in paper presentation session of International Workshop on Wavelets, Frames and Applications, Kirorimal College, University of Delhi (15-12-11 to 21-12-11).
- Acted as **Chairperson** and delivered a **talk** in International Colloquium on History of Mathematical Sciences and Symposium on Non-Linear Analysis, SSJ Campus Almora (16-05-11 to 19-05-11).
- Delivered **lecture** "Some Fixed point Iteration Techniques and Applications" in National Workshop on Computational Mathematics, GJU&ST, Hisar (26-03-2011).
- Delivered **lecture** "A fixed point approach to Ulam Stability problem for cubic and quartic mappings in Non-Archimedean Fuzzy Normed Spaces" in The World Congress on Engineering, London, U.K. (30-06-10 to 02-07-10).
- Acted as **Chairperson** in paper presentation session of International Conference on Recent Trends in Mathematics and its Applications, Jamia Millia Islamia (30-03-09 to 31-03-09).

- Delivered **lecture** on "Some fixed point Iteration techniques" in International Conference on Operator Theory and Related Areas, University of Delhi (09-01-08 to 12-01-08).
- Delivered **lecture** on "Fuzzy Set Theory and Its Applications" in National Seminar of 21st Century Renaissance: Transformation in Technology and Life, Delhi College of Arts and Commerce. (02-04-07 to 04-04-07)
- Delivered lecture on "Developments in Fixed Point Theory" in International Conference of the New Millennium on History of Mathematical Sciences, University of Delhi (20-12-01 to 23-12-01).

## **Refresher Courses:**

- Acted as **Resource Person** and delivered lecture on "An introduction to various spaces" in Refresher Course in Mathematics, UGC Academic Staff College B.P.S. Mahila Vishwavidyalaya, Khanpur, Sonipat (03-12-2014).
- Acted as **Resource Person** and delivered lecture on "Hyers-Ulam-Rassias stability of Functional Equations" in Refresher Course in Mathematics, UGC Academic Staff College B.P.S. Mahila Vishwavidyalaya, Khanpur, Sonipat (30-12-2013).
- Delivered Extension lecture on "Topological and Uniform Spaces" in Refresher Course in Mathematics, UGC Academic Staff College B.P.S MahilaVishawavidyalaya, Khanpur, Sonipat (Dec. 2010).
- Delivered **Extension lecture** on "Mathematics and Its Applications" in Refresher Course in Mathematics, Govt. P.G. College, Bhiwani sponsored by Commissioner Higher Education, Haryana (12-05-08 to 01-06-08).
- Delivered **lecture** on "Non-Linear Functional Analysis" in Refresher Course in Mathematics at C.P.D.H.E., University of Delhi (14-12-07 to 05-01-08).
- Delivered **lecture** on "Applications of Fixed Point Theory" in Refresher Course in Mathematics, C.P.D.H.E., University of Delhi (27- 12-04 to 15-01-2005).
- Delivered **lecture** on "Fuzzy Fixed Point Theory" in Refresher Course in Mathematics, C.P.D.H.E., University of Delhi, Delhi (15-12-03 to 06-01-04).
- Delivered **lecture** on "Fixed Point Theorems" in Refresher Course in Mathematics, C.P.D.H.E., University of Delhi, Delhi (13-03-02 to 04-04-02).