CURRICULUM VITAE

1. Name Pawan Kumar Jain

2. Date of Birth 15th December 1942

3. Nationality Indian

4. Present Position and Address

Professor of Mathematics and
Programme Coordinator, DRS (SAP of the UGC)

Department of Mathematics
University of Delhi, Delhi - 110 007, INDIA

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5. Academic Qualifications

(i) B.A. (Mathematics 'A' and 'B' Courses) from Punjab University in 1961 with First Division securing 335/500 marks (84% marks in Mathematics).

(ii) M.A. (Mathematics) from University of Delhi in 1964 with First Division securing 550/800 marks.

(iii) Ph.D. in Mathematics from the University of Delhi, Delhi in 1970.

6. Academic Positions/Teaching Experience

Position held	Name of Institution	From	To
Head, Department of Mathematics	University of Delhi	05.10.1996	04.10.1999
Professor	University of Delhi	26.07.1986	Till date
Reader	University of Delhi	26.07.1976	25.07.1986
Senior Lecturer	Hans Raj College (University of Delhi)	01.06.1972	25.07.1976
Lecturer	Hans Raj College (University of Delhi)	17.09.1966	31.05.1972
Assistant Lecturer	Hans Raj College (University of Delhi)	22.07.1965	16.09.1966
Part Time Lecturer	S.G.T.B. Khalsa College (University of Delhi)	17.09.1964	21.07.1965

7. Honours/Awards

- Elected **Fellow of the National Academy of Sciences, INDIA** in 1998.
- **Programme Coordinator of DRS** – Phase II (under Special Assistance Programme of the UGC) for a period of five years (1999-2004) – Department of Mathematics, University of Delhi, Delhi – 110 007; the thrust area being identified is **Analysis and Its Applications Including Computational Aspects.**
- Nominated by the Indian National Science Academy to visit U.K. for three weeks during 2000-2001 under the Exchange of Scientists Programme between INSA and Royal Society, London.
- Awarded a Visiting Professorship at Yarmouk University, Irbid (Jordan) for a period of five years under the "Joint Professorship Programme in Science and Sustainable Development" of ICSU/TWAS/UNESCO/CSE/Earth Council (1996-2001).
- Elected as a representative of Eastern and Far Eastern Countries for the Jordanian Mathematical Society.
- The U.G.C. granted funds for a major research project entitled **"Computational Aspects of Sobolev Spaces and Related Partial Differential Equations".**

8. Administrative Experience

- **Head**, Department of Mathematics, University of Delhi, Delhi for a period of three years (05.10.1996 to 04.10.1999).
- **Treasurer and University Representative** on the Governing Body of Dyal Singh College (Morning & Evening) (1997-98 & 1998-99).
- **University Representative** on the Governing Bodies of the following Colleges of the University of Delhi:
  - Guru Govind Singh College of Commerce (1997-98 & 1998-99)
  - M.V. College of Education (1999-00, 2000-01)
  - College of Vocational Studies (2000-01)
  - Satyawati Co-educational College(morning & evening) (2000-01 & 2001-02)
  - Delhi College of Arts and Commerce (2002-03)
  - Raj Kumari Amrit Kaur College of Nursing, New Delhi (2003-04)
- **Chairman** on the Review Committee for Ten Colleges of the University of Delhi, Delhi.
- **Chairman** of the Central Pool Grievance Committee in respect of Non-Academic Staff borne on the Central Pool of the University.
- Member of the Cafetaria Advisory Committee, University of Delhi, Delhi
- **Expert Member** in various Committees of the UGC, eg., Curriculum Development Committee, Committee for Accreditation to West Bengal, Andhra Pradesh, Himachal Pradesh, Tamilnadu and Maharashtra SELET; Committee for reviewing the Research Scientists; Expert Committee for Travel Grant Assistance to attend International Conferences abroad; Expert Committee to assess the requirements of the Universities/Colleges for setting up Computer Laboratories; Review Committee for UGC Research Awards; Scheme of Emeritus Fellowships; Review Committee of the UGC for the assessment of the five year plan.
- Member of the Expert Panel for Fast Track Proposals for Young Scientists in Earth, Atmospheric & Mathematical Sciences of **DST.**

- Expert member in Mathematics for Commonwealth Scholarship/Fellowship Plan**(Ministry of HRD)**
- Expert member on various committees of UPSC.

9. Official Positions held/holding in Professional / Academic Bodies, Societies etc.

- A **core member** on the Curriculum Development Committee in Mathematics of the U.G.C.
- **Chairman** of the Writing Team for Mathematics for Higher Secondary Stage constituted by the NCERT.
- **Member** of the Regional Library Committee (North Region)
  National Board of Higher Mathematics.
- **Chairman**, Mathematics Year 2000 Committee constituted by the Department of Mathematics, University of Delhi, Delhi.
- **Co-Chair**, Committee for the World Mathematical Year (WMY) 2000, Delhi
- **U.G.C. nominee** on the Advisory Committee of the DSA Programme (under SAP of the U.G.C.) in the Department of Mathematics, R.D. University, Jabalpur for a period of five years (1994-99).
- **Chancellor's Nominee** for West Bengal College Selection Commission, Calcutta.
- **Chancellor's Nominee** on the Selection Committee for the subject of Mathematics at the University of Kalyani, Kalyani, West Bengal.
- **Subject Expert** on Selection Committees for the subject of Mathematics for various universities in the country.
- Associated in the organizations of various Seminars/Conferences/ Workshops at National and International level.
- **Member** on the Editorial Boards of various Journals and Academic Societies.
- **Expert Member** on the Boards of Studies, Faculties, R.D.C. etc. of various Universities in India.
- Organized several Refresher Courses.

10. Visits Abroad

- Visited Yunnan University, Kunming, P.R. China to participate a deliver and invited talk in the ‘ Southeast Asian Mathematical Society’ conference held during December 14-18, 2003. Also, chaired a session in the conference.
- Visited The Chinese University of Hong Kong to participate and deliver invited talk in ICM 2002 Satellite Conference held from August 14 to 17, 2002. Also, visited The Hong Kong University of Science and Technology during August 17-19, 2002.
- Visited U.K. for three weeks(March 19-April 6, 2001) under INSA-Royal Society Exchange of Scientists Programme delivering lectures at the University of Sussex, Imperial College (London) and Mathematical Institute (University of Oxford, Oxford).
- Visited Kashan University (I.R. Iran) to participate and to deliver invited talks in the International Congress on Ghiyath Al-Din Jamshid Kashani (ICGK-2000) held during November 9-11, 2000. The visit was supported partially by the organizers.
- Visited Yarkmouk University, Irbid-Jordan under “Joint Professorship in Science and Sustainable Development” Programme of ICSU/TWAS/UNESCO/CSC/Earth Council during September 11-October 10, 1997 (First Visit) and August 22–September 22, 1998 (Second Visit).

- Visited as Professor to Yarkmouk University, Irbid (Jordan) for one semester (5.2.1996 to 1.6.1996).
- Visited a few universities in U.S.A.; namely, University of Central Florida, Orlando, Florida; Auburn University, Alabama; Tusgegee University, Tusgegee, Alabama and Clark University, Atlanta, during March 15-30, 1995 attending American Mathematical Society Conference at Orlando, finalizing the editing of a book and delivering lectures on my topics of specialization. The visit was sponsored by various agencies like CSIR, DST, INSA and the University of Delhi. Also, visited Giessen University, Giessen (Germany) during March 31-April 2, 1995.
- Visited as Professor to Kuwait University (Kuwait), for one academic year (1.9.1983 to 31.8.1984).
- Visited as Professor of Pure Mathematics to the University of Khartoum, Khartoum (Sudan) for two years (5.8.1981 to 31.8.1983).
- Visited a few Universities in U.S.A./Canada ; namely, University of Clemson, South Carolina (U.S.A.), McMaster University, Hemilton, Ontario (Canada), Ottawa University, Ottawa (Canada) during the summer of 1982, under a research project on my topic of specialization, sponsored by a grant of the University of Khartoum, Khartoum (Sudan).
- Visited as Associate Professor of Mathematics the University of Dar-es-Salam (Tanzania) for two academic terms during the year 1977-1978.

11. Field of Specialization

Analysis (Complex Analysis and Functional Analysis)

The precise topics of my current interests in research are:

- Banach Frames
- Sobolev Spaces and Applications to PDE
- Hardy Type Inequalities
- Geometry of Banach Spaces
- Theory of Bases and Schauder Decompositions of Banach Spaces and Topological Vector Spaces

12. Publications

- 111 research papers and 12 expository papers have been published/accepted for publication in various international scientific journals including Annales Institute Fourier-Grenoble (France), Bulletin des Science Mathematique (France), Math. Nachr., Bull. Australian Math. Soc., Jour fur die reine agrewandte mathematike, Acta Sci Math. (Szeged)-Hungary, Czechoslovak Mathematica, Jour. Indian Math. Soc., Rev. Roum. Math. Pures Appl., Bull. Acad. Polon. Sci., Japan Math., Analysis Mathematica, Lecture Notes in Mathematics (Springer-Verlag), Mathematical Inequalities and Applications, Italian Jour. Pure and Appl. Math., Canadian Bulletin of Mathematics etc.
- Six text books have been published (four by Wiley, one by Narosa and one by S.Chand & Co.)
- A book on “General Measure and Integration” is in preparation as an **invitee author** by the U.G.C.
- Abridged and Edited the English Translation of the book **“Introduction to the Theory of Cubature Formulas” by Academician S.L. Sobolev** (originally in Russian).

  Edited/co-edited six other books - Published, one by New Age International and five by Narosa Publishing House - Two of them are co-published by Alpha Science

International Ltd. U.K. and one by CRC Press, New York also, while one another is accepted by American Mathematical Society.

- Editor-in-Chief :
  - Journal of Analysis and Applications
  - Journal of Applied Algebra and Discrete Structures

13. Research Guidance

- **Guidance for Ph.D.** Twenty one scholars have been awarded Ph.D. degrees, under the supervision of P.K. Jain (independently/ jointly), from the University of Delhi **(19)**, Meerut University **(1)** and the University of Khartoum **(1)**.

- **Guidance for M.Phil.** Twenty three candidates have completed their dissertations for M.Phil. degrees and two more are in process.

14. Research Grants

- Received grants from the University Grants Commission (India) for research work for the years 1967, 1970, 1971, 1972, 1973-74 and 1988-90 on various research projects.
- Received a grant of U.S. Dollars 2300=00 from the University of Khartoum (Sudan) under a research project to visit certain universities in U.S.A./Canada during the summer of 1982.
- Received a grant of U.S. Dollars 270=00 from the University of Khartoum (Sudan) under a research project during the year 1982-83.
- Identified by the University Grants Commission (UGC) as an **Invitee Author** for writing the university level book on "General Theory of Measure and Integration" with a supporting grant of Rs. 15,000/-.
- Received grants/awards from the Department of Science and Technology(DST), Indian National Science Academy, Council of Scientific and Industrial Research and University of Delhi to attend the American Mathematical Society Conference held at ORLANDO on March 17 & 18, 1995.
- Received financial assistance from the University Grants Commission for the **Major Research Project** entitled "Computational Aspects of Sobolev Spaces and Related Partial Differential Equations".
- Received grants from INSA , Royal Society (London) and the University of Delhi to visit U.K. for a period of three weeks during 2000-01 under INSA-Royal Society Exchange of Scientists Programme, besides the local hospitality by King's College (London) and University of Oxford.
- Received a partial support from the Department of Science and Technology(DST) to attend the 'Southeast Asian Mathematical Society' held at Yunnan University, Kunming, P.R. China during December 14-18, 2003.

15. Membership or Fellowship of Professional / Academic Bodies, Societies etc.

- American Mathematical Society – Member (1984, 1995, 1999, 2000, 2001, 2002, 2003).
- Jordanian Mathematical Society – Member (1996, 1997, 1998, 1999, 2000, 2001).
- Indian Mathematical Society – Life Member.
- Indian Sciences Congress Association – Life Member.
- Allahabad Mathematics Society – Life Member.

- Society of Mathematical Sciences, University of Delhi, Delhi (India) – Life Member.
- Indian Society of Industrial and Applied Mathematics – Life Member.
- Ramanujan Mathematical Society – Life Member.
- National Academy of Sciences, Allahabad – Life Member.

16. Other Academic Activities

- **Reviewer** of research papers sent by Mathematical Reviews, American Mathematical Society (U.S.A.) and Zentralblatt fuer Mathematik (Germany).
- **Referee** for research papers to be published in various journals from India and abroad.
- Delivered 80 invited talks/colloquium lectures (19 outside India and 61 in India) and chaired 40 sessions in various Seminars, Symposiums and Conferences in India and abroad .
- Delivered 41 series of lectures to college/university teachers under the U.G.C. Refresher Course Program arranged by the Academic Staff Colleges of various universities in the country.