



INDIAN MATHEMATICAL SOCIETY

(ESTABLISHED: 1907 ; REG. NO. S-550, Delhi)

Regd. Office: Department of Mathematics, University of Pune,
Pune

<http://www.indianmathsociety.org.in>

NEWS LETTER

NO. 32

August – 2014

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August, 2014

IMS

INDIAN MATHEMATICAL SOCIETY

80th ANNUAL CONFERENCE

(December 27-30, 2014)

The 80th Annual Conference of the Indian Mathematical Society will be held under the auspices of Indian School of Mines, Dhanbad, Jharkhand during December 27-30, 2014 under the Presidentship of Prof. S. G. Dani, Department of Mathematics, I. I. T., Bombay.

Correspondence pertaining to arrangements for accommodation etc. at Indian School of Mines, Dhanbad during the Conference should be addressed to Dr. S. P. Tiwari (Local Organizing Secretary, 80th Annual Conference of the IMS), Department of Applied Mathematics, Indian School of Mines, Dhanbad (Jharkhand) India. His e-mail address is sptiwarimaths@gmail.com and the contact mobile number is 09431711226.

Details for sending Papers for presentation at the Conference :

1. Papers should be typed double spaced on an A₄ size white paper and should be accompanied by an Abstract in triplicate prepared *as per the instructions and format given at later stage*. Abstract should be brief and should not exceed 250 words. The use of Formulae and symbols should be minimized. **Abstracts received without full length paper shall not be considered.**

2. Papers should be sent *by registered post* with the words “*For the 80th IMS Annual Conference*” written in a box on the left hand top corner of the envelope to The Academic Secretary, Prof. M. M. Shikare, Department of Mathematics, University of Pune, Pune

411007 (Maharashtra), so as to reach him **not later than October 31, 2014** (after which date no paper will be accepted). See also points 3 and 4 in the following.

An E-mail address must be mentioned in the address of the author in the paper.

3. A copy of the abstract and the paper must also be sent electronically (in .pdf format) to the Academic Secretary Prof. M. M. Shikare at his e-mail address : mmshikare@gmail.com

4. A copy of the paper and the abstract should be retained by the author and brought for use at the time of the Conference as it would not be possible for the Society to make the paper available at the Conference.

5. Every paper submitted for presentation should be classified, as far as possible, according to the **following classification scheme / codes** and the same should be prominently displayed *in red ink* on the left hand top corner of the abstract.

- (A) Combinatorics, Graph Theory and Discrete Mathematics.
- (B) Algebra, Number Theory and Lattice Theory.
- (C) Real and Complex Analysis (including Special Functions, Summability and Transforms).
- (D) Functional Analysis.
- (E) Differential / Integral / and Functional Equations.
- (F) Geometry.
- (G) Topology.
- (H) Measure Theory, Probability Theory and Stochastic Processes, and Information Theory.
- (I) Numerical Analysis, Approximation Theory and Computer Science.
- (J) Operations Research.
- (K) Solid Mechanics, Fluid Mechanics, Geophysics and

Relativity.

- (L) Electromagnetic Theory, Magneto-Hydrodynamics, Astronomy and Astrophysics.
- (M) Bio-Mathematics.
- (N) History and Teaching of Mathematics.

Every author intending to present a paper should either be a member of the Society or should register himself / herself as a Sessional Member. In the case of joint authors, both the authors must be either members or should become Sessional Members. Non-members wishing to become Annual members can do so by paying Rs. 250/- Those wishing to become Sessional Members can also do so by paying Rs. 250/-. The amount can be paid to the Treasurer, Prof. S. K. Nimbhorkar, Department of Mathematics, Dr. B. A. M. University, Aurangabad – 431 004 (MS) by sending a **Bank Draft drawn in favour of the Indian Mathematical Society payable at Aurangabad (Maharashtra)**, so as to reach him by December 10, 2014. *After this date*, applications for becoming a Sessional member will be accepted only at the venue of the Conference at Indian School of Mines, Dhanbad, Zarkhand during December 27-30, 2014.

Acceptance of a paper for presentation does not automatically imply its acceptance for publication in the Journal of the Indian Mathematical Society or in The Mathematics Student. In case an author wants a paper to be considered for publication in either of these periodicals, he/she should submit the same separately to the Editor concerned.

Award of Various Prizes

The Indian Mathematical Society awards following prizes.

A. P. L. Bhatnagar Memorial Prize.

This Prize is awarded annually to the top scorer of the Indian Team at the International Mathematical Olympiad. It consists of a cash prize of Rs. 1000/- and a Certificate. The Prize is presented during

the Inaugural Session of the Annual Conference of the Indian Mathematical Society.

B. A. Narasinga Rao Memorial Prize.

This Prize is awarded to the author of the best research paper published in the Journal of the Indian Mathematical Society or The Mathematics Student. The Prize carries a token amount of Rs. 2000/- along with a Certificate.

The Prize is recommended by a committee consisting of The Academic Secretary, Indian Mathematical Society (Convener), Editor, Journal of the Indian Mathematical Society and the Editor, The Mathematics Student. The Prize is awarded during the Inaugural Session of the Annual Conference of the Indian Mathematical Society.

Following conditions apply :

1. The research paper must be under single authorship, the research work must have been carried out in India and the post-doctoral research work is preferred.
2. The upper age limit of the awardee should not be more than 45 years as on the date of receipt of the paper by the Editor.

C. Various Prizes for Research Paper Presentation.

In order to encourage and inspire the young and budding research workers, the Society holds, during its Annual Conferences, a Special Session of Paper Presentation Competition for various Prizes to be awarded to the best research papers presented. This Special Session is held as a part of the Academic Programme with no other parallel session.

Following are the areas and the grouping for these prizes :

1. **IMS Prize-group-1:** Discrete Mathematics (Combinatorics, Graph Theory, Posets), Lattice Theory, Set Theory, Logic, Number Theory and related areas.

2. **IMS Prize-group-2** : Algebraic Geometry, Geometry, Topology, Algebraic Topology, and related areas.
3. **IMS Prize-group-3** : Measure Theory, Probability Theory, Stochastic Processes, and related areas.
4. **IMS Prize-group-4** : Differential / Integral / Functional equations and inequalities, Special Functions , Numerical Analysis and related areas.
5. **IMS Prize-group-5** : Solid Mechanics, Fluid Mechanics, Electromagnetic Theory, Magneto- Hydrodynamics, Astronomy, Astrophysics, Relativity and related areas.
6. **IMS Prize-group-6** : Operations Research, Optimization, Computational Mathematics, Information Technology, Biomathematics, History of Mathematics and related areas

AMU Prize: Algebra, Differential Geometry and Functional Analysis.

V M Shah Prize: Real Analysis, Complex Analysis, Fourier Analysis, Harmonic Analysis, Approximation Theory and related areas.

Three / Four judges are appointed by the Council for the “Paper Presentation Competition” for deciding the award of various Prizes. Each of these eight prizes listed above carries a Certificate and a cash amount of Rs. 1000/-.

Following conditions apply:

1. Only the Members of the Society are eligible for participation in the Competition.
2. The upper age limit of a candidate for participation in the Competition is 40 years as on December 31 of the respective year.
3. (a) The paper to be presented for the competition has

to be under single authorship.

- (b) Independent work at the post-doctoral level is preferred.
 - (c) The work must have been carried out in India.
 - (d) Stress will be on both, quality of research as well as performance during the presentation.
4. Two copies of the full paper with the abstract in triplicate (not exceeding 250 words) prepared as per the details mentioned in the above **as well as its electronic version in .pdf format** should reach Prof. M. M. Shikare on the address given earlier not later than October 31, 2014. Candidates should also submit their latest CV and the proof of their age (high school certificate will do) along with the papers.

An E-mail address must be mentioned in the address of the author in the paper.

Note : One who is already awarded a prize in a certain area in the past is not expected to participate in the competition for the prize **in the same area.**

An appeal :

All the Heads of the Departments / Institutions and the Research Supervisors are requested to encourage their research students for participation in this Competition.

INSTRUCTIONS FOR PREPARING ABSTRACT.

The following instructions should be followed carefully to ensure smooth editing and printing of the abstract:

- (1) Computer print out of the Abstract is required.
- (2) The use of Formulae and symbols should be minimized.
- (3) List of references should not form part of the abstract.

- (4) Classification of the abstract is a must.
- (5) Full address is not allowed, **E-mail address is a must.**
- (6) The word “abstract” should not be written.
- (7) Abstract must begin with the title of the paper.
- (8) Coma should be inserted at the end of the title and the name(s) of the author(s) be written on the same line.
- (9) The name of the author’s town should be written in brackets after the name; in case of two (or more) authors from the same town, the town be mentioned only after the last author’s name.

The abstract is likely to be rejected if any of these instructions (particularly (1), (2), (5) and (7)) is violated.

The abstract **and its electronic version in .pdf format** should be sent to Prof. M. M. Shikare on the address given earlier so as to reach him not later than October 31, 2014 (after which date no paper will be accepted).

FORMAT FOR ABSTRACT INDIAN MATHEMATICAL SOCIETY

Name of the Author(s) :
Institution(s) :
Name of the Presenter :
Address for Correspondence :

ABSTRACT : The abstract must be accommodated in the space as in the box below in strict accordance with instructions given above. The word “abstract” must not be written in the box.

SECTION: The Section (A, B, C, etc.) should be carefully chosen and entered here. Refer the classification codes given earlier.

Periodicals published by the Society

The Society publishes two periodicals – *The Journal of the Indian Mathematical Society* (JIMS ; the Journal ; ISSN 0019-5839) and *The Mathematics Student* (Math Student ; the Mathematics Student; ISSN 0025-5742) , both of which are quarterly.

- ❖ *Only the research papers of high quality* are published in the Journal.
- ❖ Ordinarily the following is published in The Mathematics Student :
 - the texts of Presidential Addresses, the Plenary talks and the Award Lectures delivered at the Annual Conferences,
 - the abstracts of the research papers presented at the Annual Conferences,
 - the texts of the invited talks delivered at the Annual Conferences,
 - research papers, and
 - the Proceedings of the Society's Annual Conferences, Expository & Popular articles, Book Reviews, Reports of IMS Sponsored lectures, etc.

Copyright : Copyright of the articles published in the Journal or the Student lies with the Indian Mathematical Society.

Manuscript Submission :

Manuscripts intended for publication should be submitted **online** in the LaTeX, .pdf file including figures and tables.

For the Journal, manuscripts in the electronic form should be submitted to Prof. Satya Deo, Editor, JIMS (E-mail : jimsmorane@gmail.com). For the Mathematics Student, manuscripts in the electronic form should be submitted to Prof. J. R. Patadia, Editor, The Mathematics Student (E-mail : jamanadaspat@gmail.com).

Manuscript Style :

Manuscripts (including bibliographies, tables, etc.) should be typed double spaced on A₄ size white paper with 1 inch (2.5 cm.) margins on all sides with font size 11 pt., preferably in LaTeX. Sections should appear in the following order : Title Page, Abstract, Text, Notes and References. Comments or replies to previously published

articles should also follow this format with the exception of abstracts. While typing in LaTeX, the following Preamble be used:

```
\documentclass[11pt]{amsart}
\usepackage{amsfonts,amssymb,amscd,amsmath,enumerate,verbatim,calc}
\renewcommand{\baselinestretch}{1.2}
\textwidth=11.5cm
\textheight=19.5cm
\topmargin=0.5cm
\oddsidemargin=0.5cm
\evensidemargin=0.5cm
\pagestyle{plain}
```

Title Page: The Title page should include the manuscript title, authors' names & permanent affiliations and the name, address & e-mail address of the author to whom galley proofs and soft copy (PDF file with watermarked 'Author's copy') of the paper published (in place of reprints) is required to be sent.

Abstract: The following page should include an abstract of not more than 100 words, a list of two to six key words and AMS subject classification (2010).

Text: The text of the manuscript should begin on a new page. The introduction should have heading number 1. Subsequent section headings (including appendices) should be designated by Hindu-Arabic numerals (2,3,...etc.) and subsection headings should be numbered 2.1, 2.2, etc. Figures, tables and displayed equations should be numbered consecutively throughout the text (1, 2,... etc.). Equation numbers should appear flush left in parentheses and running variables for equation (e.g., $i = 1, 2, \dots, n$) flush right in parentheses.

References: Responsibility for the accuracy of bibliographic citations lies entirely with the Authors. References in the text be indicated by number(s) in square brackets in line with the text. Example: "... as mentioned in [2, 8]. Ramanujan [9] obtained the

following result ...”. In the list, the references should be numbered in the order in which they appear in the text. Examples:

Reference to a journal publication:

1. G. Birkhoff, *Neutral elements in general lattices*,
Bull. Amer. Math. Soc. 46 (1940), 702–705.

Reference to a book:

2. J. Munkres, *Elements of Algebraic Topology*,
Addison–Wesley, 1984.

Illustration Style: Originals for illustrations should be sharp and of good contrast. Each Figure and Table should be mentioned in the text and numbered consecutively using Hindu-Arabic numerals. For each Figure and Table, its desired location in the text should be clearly specified. Each Figure and Table must have a caption. Example of proper style for captions : “Figure 1” or “Table 1”. Suggested Figure formats are : TIFF, GIF, EPS, PPT and Postscript. Files should be at least 300 dpi.

Reprints: Authors of the papers printed in the Journal as well as in the Mathematics Student shall be entitled to receive a **soft copy (PDF file with watermarked “ Author’s copy”)** of the paper published.

There are **no page charges** for publications in the Journal as well as in the Mathematics Student. However, **if author(s)** (whose paper is accepted for publication in any of the IMS periodicals) **is (are) unable to send the LaTeX file of the accepted paper, then a charge Rs. 100 (US \$ 10) per page will be levied for LaTeX typesetting charges.**

Subscriptions

- ❖ Annual subscription for the Journal / the Mathematics Student :
For each periodical
 - Rs.1500/- for Libraries of Educational Institutions in India - provided the subscription is direct or through an agent who

gives complete name and address of the subscriber. The supply will be made directly to the subscribing library.

- Rs. 1800 for Libraries of Educational Institutions in India when the subscription is made through an agent who gives complete name and address of the subscriber. The supply will be made directly to the subscribing library. The agents will get 15% discount.
- Rs. 6000/- for others for personal use or to the agents who do not supply the names and addresses of the end users. In this case, the agents will get 20% discount.
- \$150/- for personal use or for Libraries outside India.

The agents are entitled to get 20 % discount on their orders.

Each issue of The Mathematics Student is being sent to the Life Members **in electronic form** to their E-mail address registered by the members with the Society for their personal use (not for circulation). No hard copy of this periodical will be sent to the Members. Those Members who have not registered their e-mail address are requested to register it on <imgoesgreen@gmail.com>. It may please be noted that the contents of The Mathematics Student will continue to be available on the Society's website www.indianmathsociety.org and a physical copy of The Mathematics Student will continue to be available at the IMS Library (Ramanujan Institute of Advanced Study in Mathematics, Madras University, Chennai) as well as at the Registered Office of the Society (Department of Mathematics, University of Pune, Pune – 411 007) for reference during office hours.

Membership of the Society

Life Membership Fees :

Rs.2000/- (US \$1000/- for those residing outside India - referred to as *International Life Members*).

The Life Members of the Indian Mathematical Society who have registered their e-mail with the Society are entitled to a FREE online access to The Mathematics Student or a FREE copy, **online in electronic form**, of The Mathematics Student for their personal use (not for circulation).

Ordinary Annual Membership Fees :

Rs. 250/- (US \$100/- for those residing outside India).

Sessional Membership Fees :

Rs. 250/- (US \$100/- for those residing outside India).

Sessional Members are those who join the Society only for a particular Session. They may contribute paper(s) for presentation and / or participate in any of the academic programmes held during the Session.

- *Membership form is available on the IMS website.*

Business Correspondence and Payments :

All business correspondence be addressed to Prof. S. K. Nimbhorkar, Treasurer, IMS; Department of Mathematics, Dr. B. A. M. University, Aurangabad – 431 004 (Maharashtra), India. All payments are to be made to Prof. S. K. Nimbhorkar, Treasurer, IMS by DD drawn in favour of “**The Indian Mathematical Society**” payable at **Aurangabad** (Maharashtra), India at the address mentioned above.

Member in good standing :

A member is considered to be of good standing in a particular year if he/she has paid his/her Membership fees by **July 31** of that year.

IMS Library

The Indian Mathematical Society Library is housed in the Campus of the Ramanujan Institute for Advanced Study in Mathematics,

University of Madras, Chennai – 600 005 ever since it was shifted from Pune.

The Library receives many journals on Exchange basis and has a rich collection of back numbers of reputed mathematical journals received from all over the world. The complete catalogue of the back volumes of all the periodicals published by the Society as well as those received in exchange by the Society and available in the IMS Library, Chennai, is now displayed on the IMS website. There is a spate of request for photocopies of articles published in these journals and the Library attends to these demands promptly. If a particular journal is not available in the IMS Library, the scholars / students are requested to contact other Libraries where it is likely to be available providing them with the addresses of those Libraries.

The address of the IMS Library is:

The Indian Mathematical Society Library,
The Ramanujan Institute for Advanced Study in Mathematics,
University of Madras, Chepauk, Chennai – 600 005.
Phone : (O) +91-44-25360357, (M) 09600097799
E-mail : premalatha.kumaresan@gmail.com

For further information one may contact Prof. Premalatha Kumaresan, Director, Ramanujan Institute for Advanced Study in Mathematics, University of Madras, Chennai, who is the Honourary Librarian for the Indian Mathematical Society Library.

NOMINATIONS FOR ELECTION TO THE COUNCIL OF THE SOCIETY

The Council has made the following nominations for elections to the Council:

President: Prof. A. M. Mathai, Pala, Kerala for the election to the office of the President of the Society for a period of one year w. e. f. April 1, 2015.

The following nominations are made as members of the Council for the next three years:

Dr. P. B. Vinod Kumar (Rajagiri School of Engineering and Technology, Rajagiri Valley, Cochin), Prof. Manjusha Muzumdar (Calcutta University, Kolkata) and Dr. Bankateshwar Tiwari (BHU, Varanasi) are nominated for election as members of the Council for a period of three years w. e. f. April 1, 2015.

Any member of the Society may submit to the Returning Officer, *Prof. M. M. Shikare*, Department of Mathematics, University of Pune, Pune – 411 007, Maharashtra, India an alternative list of name(s) for some or all of the above vacancies; only such nominations being considered valid as are supported in writing by a letter of consent from each one of the candidates proposed by a member, so as to reach the Returning Officer not later than the October 5, 2014.

The nominations made by the Council with an indication made to that effect, together with other valid nominations made by members of good standing of the Society shall be submitted by the Returning Officer to all members of the Society in good standing by means of ballot papers sent by post by November 10, 2014 with instructions to be returned to him latest by the December 10, 2014.

(A member will be considered to be of good standing if his/her membership Fees are not in arrears and if he/she has paid his/her membership Fees for the current year by July 31, 2014).

The Returning Officer shall collect the ballot papers returned to him by the members up to December 10, 2014 and carry them to the venue of the Conference, where they will be opened and counted by him (or his nominee) in the presence of a committee consisting of the President (or his nominee) and the other Secretaries. A simple majority shall determine the result of the election in each case.

The list of newly elected office-bearers and additional members of the Council shall be announced at the General Body Meeting going to be held during the Annual Conference. The new Council shall assume charge of its office with effect from the April 1, 2015.

MINUTES OF THE ANNUAL GENERAL BODY MEETING OF THE SOCIETY HELD IN THE SEMINAR HALL NO. 1, RAJAGIRI SCHOOL OF ENGINEERING AND TECHNOLOGY, COCHIN, KERALA ON DECEMBER 31, 2013 AT 12:15 PM

The Annual General Body Meeting of the Indian Mathematical Society was held on Tuesday, December 31, 2013 at 12.15 p.m. in Seminar Hall No. 1 of the Rajagiri School of Engineering and Technology, Rajagiri Valley, Cochin, Kerala.

The following business was transacted.

Item No. 1. To confirm the Minutes of the General Body meeting held. on January 25, 2013 at 12.15 p.m. in Seminar Complex, Faculty of Science, of the Banaras Hindu University (BHU), Varanasi.

The Minutes of the General Body meeting held on January 25, 2013 at 12.15 pm at Varanasi were confirmed.

Item No. 2 : To receive the report of the General secretary for 2013.

Report of the General Secretary for 2013

Two IMS News Letters - No. 29 in March 2013 and No. 30 in August 2013 were published. They are also displayed on the

IMS Website. The Society has decided to send online the soft copy of the Mathematics Student / give online access to the Mathematics Student to all the Life members instead of supplying the hard copy. The IMS News letters No 29 (March 2013) and No. 30 (August 2013) have been sent online to all the members of the Society.

A Special Volume of the Journal of the Indian Mathematical Society that was planned to be brought out to commemorate the 125th birth anniversary of legendary Indian mathematician Srinivas Ramanujan has been published.

Institution of THE GANIT RATNA AWARD

A National Conference on Discrete Mathematics, Algebra and Analysis was organized, to honor Prof. N. K. Thakare and Prof. T. T. Raghunathan on the occasion of completion of 75 years of their age, from April 21-24, 2013 at the Department of Mathematics, University of Pune, Pune. On this occasion more than Rupees Twenty five lakhs were collected by Prof. N. K. Thakare Gaurav Samiti.

The Convener, of the said Gaurav Samiti has contacted the IMS General Secretary, in person, and has expressed that they will try to collect more funds. From the interest earned on this amount an award called The Ganit Ratna Award in memory of Late Professor 'Ratan' Prakash Agarwal of Lucknow University, Lucknow could be given to a distinguished mathematician of any nationality. He informed that the said committee desires to give this award every year at the time of Inauguration of the Annual Conference of the IMS. The said committee desires that the modus operandi of selection for this award shall be on the lines of Nobel Prize, Abel Award, Bharat Ratna or Fields Medal. The said proposal is under active consideration of the IMS.

Each Life Member of the Society is now allotted a Permanent Membership Number. The complete list of Life Members of the Society is now available on the IMS website. The complete catalogue of the back volumes of the periodicals published by the Society as well as those received in exchange by the Society and available in the IMS Library, Chennai is now available on the IMS website.

Narasinga Rao Memorial Prize for 2011 was not recommended by the Committee appointed for the purpose and hence is not awarded to any one.

P. L. Bhatnagar Memorial Prize for 2013 has been awarded jointly to Mr. Sangik Saha (Kolkata West Bengal) and Mr. Shubham Sinha (New Delhi) for being the top scorers for the Indian Team (28 points) at the 54th International Mathematics Olympiad (IMO) held during July 18–26, 2013 at Santa Marta, Colombia.

The work for the registration of the Indian Mathematical Society at Pune under Society's Act 1860 is being pursued. (Presently the Society is registered at Delhi with Registration No. S – 550, Delhi).

A proposal for financial support had been submitted to NBHM in order to be able to complete the work of digitization of the back volumes of the Journal of the Indian Mathematical Society and The Mathematics Student. The matter is being pursued.

A proposal to organize a Joint Meeting (i.e. Joint Conference) of the American Mathematical and Mathematical Societies in India including the IMS in December 2016 is under active

consideration and, the AMS is being contacted with the proposal to organize the said event at Pune.

During the year of report 155 new life members were enrolled, besides 48 persons became session members of the IMS for 2013 conference.

Item No. 3 : To receive the Report of the Academic Secretary-2013.

As the resignation of Academic Secretary Prof. A. K. Srivastava was accepted by the Council, the General Secretary, Prof. N. K. Thakare presented the brief report on the academic activities for the year 2013.

Report of the Academic Secretary 2013.

A meeting of the Academic Planning Committee (APC) of IMS was held at the Department of Mathematics, University of Pune, Pune on July 07, 2013. The names of five memorial award lecturers were decided. They were all contacted by the General Secretary, Prof. N. K. Thakare, and all of them accepted the invitations. Their names, affiliations, titles of their award lectures, etc. are available in the abstract book of this conference.

Prof. Ram Murty, Canada, gave plenary talk in the Annual Conference in honour of Prof. V. M. Shah who served the IMS for nearly thirty years in various capacities. Five mathematicians gave invited talks. The titles of their talks, abstracts, etc. are mentioned in the abstract book. Five Symposia, each having about 5-6 invited speakers were organized on different topics of mathematics. Thus about 25-30 invited speakers gave talks under this category. The details would be available on the website soon.

The tentative schedule of all lectures of this conference was prepared in advance and was displayed on Society's website. The final time-table of everyday was circulated one day in advance of the actual days including minor changes, if any.

We received proposals from three institutions showing their desire to organize Annual Conference of the IMS in the year 2014.

Item No. 4 : To receive the report of the Administrative Secretary for 2013

Report of the Administrative Secretary for 2013

The soft copies of the following volumes of the periodicals of the IMS were sent to the printing press (Parashuram Process) in Pune, the matter was pursued and the volumes have been printed and published.

JIMS Volume 80, nos. 3-4 (July– Dec. 2013)

JIMS Volume 81, nos. 1-2 (January – June 2014)

JIMS Special Volume to commemorate the 125th Birth Anniversary of Srinivas Ramanujan and the National Mathematics Year 2012.

The Math. Student, Vol. 81, Numbers 1-4, (2012)

The Math. Student, Vol. 82, Numbers 1-4, (2013)

The copies of the following volumes of periodicals were dispatched to the subscribing institutes and Universities

JIMS Volume 80, nos. 3-4 (July– Dec. 2013)

The Math. Student, Vol. 81, Numbers 1-4, (2012)

The account of corresponding expenses has been submitted to the Treasurer, IMS.

Arrangements were made for holding the meeting of the Academic Planning Committee on Sunday, the 7th July 2013 from 11.00 am in the conference room of the Guest House of the University of Pune, Pune.

Proposal for getting funds from NBHM to bring out JIMS Special Volume to commemorate the 125th Birth Anniversary of Srinivas Ramanujan and the National Mathematics Year 2012 was submitted to NBHM.

With the help of Dr. Bankateshwar Tiwari of BHU, books / volumes were received (about 350) from Varanasi to Pune. The said books have been donated by Prof. B. D. Agarwal of BHU to the IMS. The IMS thanks Professor B. D. Agarwal and his family for their generous offer.

The records / documents such as minutes of the council meeting, minutes of the APC, copies of the News Letters, copies of agenda for council meeting, General body meeting etc. have been maintained.

As a Returning Officer, I would like to report that there were no new nominations for posts of President and Council members of IMS. The Council had made the following nominations for elections:

President: Prof. S. G. Dani (Department of Mathematics, I.I.T., Mumbai) for the election to the office of the President of the Society for a period of one year w. e. f. April 1, 2014.

Prof. Subhash J. Bhatt (S. P. University, Vallabh Vidyanagar), Prof. Dalip Singh Jamwal (Jammu University), Prof. Ajay Kumar (Delhi University) and Prof. A. Vijay Kumar (Cochin University of Science and Technology) are

nominated for election as members of the Council for a period of three years w. e. f. April 1, 2014.

Timely help was provided to the General Secretary, Prof. N. K. Thakare in order to be able to facilitate preparation of the academic programme of the 79th Annual Conference of the IMS held at Cochin.

Item No. 5: To consider the Audited Statement of Accounts for the year 2012 – 2013 and budget for the year 2014 – 2015.

The Audited Statement of Accounts for the year 2012 – 2013 and budget for the year 2014 – 2015 presented by the Treasurer, Prof. S. K. Nimbhorkar, was approved.

Item No. 6: To receive the report of the Editor, The Journal of the Indian Mathematical Society for 2013.

Report of the Editor, Journal of the Indian Mathematical Society for 2013.

Manuscript status:

Number of manuscripts pending with the referees or under process at the end of 2012: 31

Number of manuscripts received during 2013 : 79

Total : 110

Number of manuscripts accepted in 2013 : 40

Number of manuscripts not accepted : 40

Number of manuscripts with the referees or under process : 30

Total : 110

Publication status:

Volume 80 (1– 2) 2013 of the Journal of the Indian Mathematical Society was published and sent to the subscribers in January 2013.

Volume 80 (3 – 4) 2013 of the Journal of the Indian Mathematical Society was published in June 2013 and sent the subscribers in July 2013.

Volume 81 (1 – 2) 2014 of the Journal of the Indian Mathematical Society was published and released during the Inaugural Function of the Annual Conference of IMS on 28th Dec. 2013 at Cochin.

Volume 81 (3 – 4) 2014 of the Journal of the Indian Mathematical Society is under preparation and will be published in July 2014.

Special Volume of the Journal of the Indian mathematical Society, to commemorate 125th Birth Anniversary of Srinivas Ramanujan and National Mathematics year is being released in the Cochin Conference. Prof. A. K. Agarwal is the Guest editor for this special volume.

There is no backlog of accepted papers.

Acknowledgements:

The editor puts on record his grateful thanks to the referees from India and abroad for their assistance and support to JIMS. The editor also expresses his sincere thanks to the Treasurer of IMS, Prof. S. K. Nimbhorkar for providing valuable assistance in the overall publications of JIMS. He is thankful to Prof A. K. Agarwal for editing the Special Volume mentioned above.

Item No. 7: To receive the report of the Editor, Mathematics Student for 2013.

Report of the Editor of The Mathematics Student for 2013

Publication Status:

The Vol. 81, Nos. 1- 4, (2012) of The Mathematics Student is published and the soft copy of it is sent to all the Life Members who have registered their E-mail id with us on line on imgoesgreen@gmail.com or jamanadaspat@gmail.com. The contents of this volume is available on the Society's website.

The Vol. 82, Nos. 1- 4, (2013) of The Mathematics Student is published and its soft copy will be sent to all the Life Members at their registered E-mail addresses on line within next five weeks. The contents of this volume is also available on the Society's website.

There is no backlog as regards to the publication of the Mathematics Student issues.

Manuscript Status:

30 manuscripts are received during the period from January 19, 2013 to December 23, 2013 and 19 manuscripts were reported as pending with the referees in the last report.

Out of these total 49 manuscripts, 11 are accepted, 25 are not accepted and 13 are pending with the referees.

Acknowledgements:

The Editor takes this opportunity to put on record his sincere thanks and profuse gratefulness to the referees for their continuous support and assistance in our sustained efforts for timely publication of the Mathematics Student. The Society looks forward to the active assistance in the constructive

reviewing work as well as quality contributions from the large pool of mathematicians from India and abroad.

The Editor thanks the Treasurer Prof. S. K. Nimbhorkar and the Administrative Secretary Prof. M. M. Shikare for their assistance in the composing and printing work of the Vol. 81, Nos. 1-4, (2012) and Vol. 82, Nos. 1- 4, (2013) of The Mathematics Student.

The Editor also thanks the Department of Mathematics of the Pune University and the Pune Press for their assistance in the publication of the Mathematics Student.

Call for research contributions:

Contributions are welcome and are assured of all the sincere efforts for prompt processing.

Item No. 8 : To consider the venue of the 80th Annual Conference of the Indian Mathematical Society to be held in December 2014.

The Council accepted the firm invitation from the Director, Indian School of Mines, Dhanbad, Jharkhand for organizing the 80th Annual Conference of the Indian Mathematical Society. Dr. S. P. Tiwari, Department of Applied Mathematics, Indian School of Mines will be the Local Organizing Secretary.

Item No. 9: Announcement of the results of the following elections:

President for 2014-15 and members of the Council for a period of three years w.e.f. April 01, 2014;

The returning officer Prof. M. M. Shikare reported that the following members are declared elected.

President for 2014-15: Prof. S. G. Dani, Department of Mathematics, I. I. T., Mumbai for a period of one year with effect from April 01, 2014.

Members of the Council for a period of three years w. e. f. April 1, 2014:

Prof. Subhash Bhatt (Vallabh Vidyanagar), Prof. D. S. Jamwal (Jammu), Prof. Ajay Kumar (Delhi) and Prof. Ambat Vijayakumar (Cochin).

Item No. 10: Any other item with the permission of the chair.

Professor Ravi Kulkarni briefed on the Joint Meeting with AMS in December 2016.

Professor K. Shrinivas Rao, pleaded that IMS should approach the University of Madras , Chennai with a request to preserve the original handwritten notes of S. Ramanujan properly as, according to him, the said notes are not being preserved properly.

The Meeting ended with a vote of thanks to the Local Organizers and the President of the Indian Mathematical Society.

N. K. Thakare
General secretary
Indian Mathematical Society.

NOTICE OF THE ANNUAL GENERAL BODY MEETING

The Annual General Body Meeting of the Indian Mathematical Society will be held on Tuesday, December 30, 2014 at 12.15 p.m. in the Department of Applied Mathematics, Indian School of Mines, Dhanbad (Jharkhand), to consider the following agenda.

All the members of the Society are requested to kindly attend the meeting.

AGENDA

1. To confirm the Minutes of the General Body Meeting held on December 31, 2013 at Rajagiri School of Engineering and Technology, Rajagiri Valley, Cochin, Kerala.
2. To receive the report of the General Secretary for 2014.
3. To receive the report of the Academic Secretary for 2014.
4. To receive the report of the Administrative Secretary for 2014.
5. To consider the Audited Statement of Accounts for the year 2013-2014 and the Budget for the Financial Year 2015 – 2016.
6. To receive the report of the Editor of the Journal of the Indian Mathematical Society for 2014.
7. To receive the report of the Editor of the Mathematics Student for 2014.
8. To consider the venue of the 81st Annual Session of the Society to be held in December 2015.

9. Announcement of the results of the following elections:

President for 2015– 2016 and three members of the Council for a period of three years w. e. f. April 01, 2015.

10. Any other item with the permission of the chair.
(Members in good standing are entitled to exercise vote.)

N. K. Thakare
General Secretary, IMS.
C/o Center for Advanced Study in Mathematics
University of Pune, Pune

August 14, 2014

Highlights of the Academic Programme of the ensuing Conference at Indian School of Mines, Dhanbad, Zarkhand during December 27-30, 2014

1. Plenary Lectures : One

The Plenary Lecture will be delivered by Prof. Rajesh Gopakumar, HRI, Allahabad.

2. IMS Memorial Award Lectures :

1. The 28th P. L. Bhatnagar Memorial Award Lecture will be delivered by Prof. S. K. Tomar, Center for Advanced Study in Mathematics, Panjab University, Chandigarh.
2. The 25th Srinivasa Ramanujan Memorial Award Lecture will be delivered by Prof. B. V. Rajaram Bhat, Indian Statistical Institute, Bangalore.
3. The 25th V. Ramaswamy Iyer Memorial Award Lecture will be delivered by Prof. Sudhir Ghorpade, Department of Mathematics, I. I. T., Mumbai.

4. The 25th Hansraj Gupta Memorial Award Lecture will be delivered by Prof. Ritabrata Munshi, TIFR, Mumbai.

3. **One hour Invited Talks:**

Prof. Mursaleen, Aligarh Muslim University, Aligarh

4. **Half an hour Invited Talks:**

(i) Dr. Bankateshwar Tiwari, BHU, Varanasi

(ii) Dr. J. N. Choudhari, North Maharashtra University,
Jalgaon

(iii) Dr. V. V. Joshi, University of Pune, Pune

(iv) Prof. M. A. Sofi, Kashmir University, Srinagar

5. **Symposia:**

(i) Chaos and Complexity

Convener: Prof. R. K. Upadhyay, Indian School of Mines,
Dhanbad

(ii) Ergodic Theory

Convener: Prof. Anish Ghosh, TIFR, Mumbai

(iii) Nonlinear Analysis

Convener: Prof. Q. H. Ansari, AMU, Aligarh

(iv) Number Theory

Convener: Prof. S. A. Katre, University of Pune, Pune

NEWS AND ANNOUNCEMENTS

❖ **Guidelines for acceptance of Donations to the Society**

1. There will not be any further institution of Memorial Award Lectures. (This point was discussed in the earlier meetings of the Council and such was the consensus).
2. The donation amount will not be less than Rupees Five Lakh. (There could be an upward revision of this amount from time to time).
3. The donor may be an individual or a trust or a group of individuals.
4. The Indian Mathematical Society will solely and independently own the amount donated to it.
5. A prospective donor should approach the General Secretary of the Indian Mathematical Society with a Offer. Keeping with the spirit of this Policy Guide lines and if so felt necessary, referring to the Council whether the proposal be negotiated or not, in his wisdom, the General Secretary will negotiate the terms and conditions for each donation proposal and will put it before the Council for its consideration and approval. The Council will deliberate on the proposal, and after modifications, if any, may accept the proposal through a special resolution with specific details mentioning the terms and conditions. This will be published in the IMS News Letter after the Donor agrees to the resolution of the Council.
6. Ordinarily during every Annual Conference of the Society there are several Invited Lectures and Symposia running in parallel sessions. One of these academic programmes may be permanently marked / identified as “so and so

sponsored programme in the (fond) memory of ” or “so and so sponsored programme in the honour of ” as per the wish of each donor by the Council. This programme may be arranged in a parallel session during the Conference.

7. Each year, the Council through its Academic Planning Committee (APC) will be the final authority in this regard to finalize the name of a speaker of an invited talk or the names of the symposia speakers for this sponsored programme. The modus operandi for identifying the speaker(s) may be decided by the Council.

The invited speaker(s) will be the guest of the host institution. In case of an honorarium, if any, to the invited speaker, the amount of the honorarium will not exceed the honorarium amount for the existing Memorial Award Lectures.

8. Ordinarily train travel to the extent of AC-2 Tier be reimbursed. However, in special cases the domestic air travel may be considered.
9. Not withstanding the above
 - (A). An offer of a donation with a stipulated purpose (not as part of the corpus), may be accepted by the Council on its merit.
 - (B). An offer of a donation of any amount in general, without any stipulated conditions, may be accepted by the Council on its merit as a part of the General Purpose Corpus.

The Council reserves its right whether or not a particular donation be accepted.

❖ **Green initiative taken by the Society – A fervent appeal to all members of the Society**

As a part of the “Green Initiative” taken by the Society (for further details, refer Society’s website www.indianmathsociety.org.in), the Council of the Society has decided to send **on line** the soft copy of the Mathematics Student / give **on line** access to the Mathematics Student to all the Life members instead of supplying the hard copy. For this purpose, all the members of the Society are requested to **register their e-mail address on line**, along *with Name and the Unique Membership Number* therein, to J. R. Patadia on imgoesgreen@gmail.com or jamanadaspat@gmail.com so that further necessary action can be taken.

❖ **Fields Medals 2014 :**

Prof. Manjul Bhargava (Indian origin), Princeton University, USA for his work on Number Theory; Prof. Artur Avila (Brazil-France) for his contribution to Dynamical Systems, Prof. Martin Hairer (Austria) for his work in the study of Stochastic Partial Differential Equations; and Prof. Maryam Mirzakhani (Iranian origin), Stanford University, U.S.A for her work in Geometry and Dynamical Systems have been awarded Fields Medals 2014 by the International Mathematical Union (IMU) at the International Congress of Mathematicians 2014 (ICM 2014) held during August 13-21, 2014 at Seoul, South Korea .

Prof. Subhash Khot (Indian origin), Courant Institute of Mathematical Sciences, New York University, USA has been awarded the Rolf Nevanlinna Prize by IMU for his “prescient definition of the unique games problem and its consequences in the study of optimization problems” at the ICM 2014.

❖ **P. L. Bhatnagar Prize for 2014 to Indian Team at 54th International Mathematical Olympiad (IMO)**

The 55th International Mathematical Olympiad (IMO) was held during July 3–13, 2014 Cape Town, South Africa. The Indian team bagged 1 silver, 3 bronze medals and secured the 39th position. A six member team of students picked up from across the country schools was sponsored by the Homi Bhabha Centre for Science Education (HBCSE), an Institution under the Tata Institute of Fundamental Research (TIFR). A total of 560 students from 101 countries participated in the prestigious world event.

Sangik Saha (Kolkata, West Bengal) won the silver medal whereas Anish sevekari, Chaitanya Tappu both from Pune and Jeet Mohapatra from Odisha won bronze medal.

Sangik Saha (Kolkata West Bengal) was the top scorer at IMO from the Indian team. He will be awarded the P. L. Bhatnagar Memorial Prize of the Indian Mathematical Society for the year 2014. The prize carries a cash of Rs. 1000/- and a certificate. The Prize will be awarded to him in the Inaugural Session of the ensuing 80th Annual Conference of the Society on December 27, 2014 at the Indian School of Mines, Dhanbad (Zarkhand).

❖ **The List of Life Members of the IMS is displayed on the website of the Society**

The Complete List of the Life Members of the Society is available on the IMS website along with their Membership Numbers. Members whose mails have been returned undelivered are marked accordingly with a *note in red* along with their names on the IMS website.

Society looks forward to their correct addresses.

Members are requested to quote their membership number while communicating change of addresses, etc.

Any change or modification in the address and an e-mail id may please be communicated to the Treasurer, IMS, Prof. S. K. Nimbhorkar (if electronically, then on sknimbhorkar@gmail.com).

❖ **ISCA Awardee for the Centenary Year**

Prof. S. D. Adhikari, Harish-Chandra Research Institute (HRI), Allahabad is the ISCA Awardee for M. K. SINGAL MEMORIAL AWARD for the year 2013-14.

The IMS congratulates this distinguished scientist and wishes him the best in his pursuit of excellence.

❖ **Indian Science Congress Association (ISCA) -- Annual Session for the year 2015.**

The 102nd Session of the Indian Science Congress Association will be held at the University of Mumbai, Mumbai during January 3 - 7, 2015. The Focal Theme of the Session will be “Science and Technology for Human Development”. Dr. S. B. Nimse, Vice Chancellor, Lucknow University, Lucknow (UP) is the General President.

Prof. Ajay Kumar, Department of Mathematics, Delhi University, Delhi is the Sectional President for the section of Mathematical Sciences (including Statistics).

❖ **ISCA Young Scientist Awardee and Best Poster Awardee for Mathematical Sciences (including Statistics) for the Year 2013-14.**

Mr. R. Vishnu Vardhan, Department of Statistics, Pondicherry University, Puducherry is the ISCA Young Scientist Awardee for the year 2013-14 for the Mathematical Sciences (including Statistics).

Rakesh K. Tripathi, Govt Holkar Science College, Indore and Reena Kumari, Indian School of Mines, Dhanbad are the Best Postar Awardee for the year 2013-14 in the Mathematical Sciences.

The IMS congratulates these distinguished young researchers and wishes them the best in their pursuit of excellence.

❖ **Institution of THE GANIT RATNA AWARD ---An Appeal**

A National Conference on Discrete Mathematics, Algebra and Analysis was organized, to honor Prof. N. K. Thakare and Prof. T. T. Raghunathan on the occasion of completion of 75 years of their age, from April 21-24, 2013 at the Department of Mathematics, University of Pune, Pune. On this occasion more than Rupees **Twenty five lakhs** were collected by Prof. N. K. Thakare Gaurav Samiti. The funds will be deposited in a bank and the interest earned thereof will be utilized to institute a prestigious award to be given to a distinguished mathematician.

The award will be called **THE GANIT RATNA AWARD** in memory of Late Prof. 'Ratan' Prakash Agrawal of Lucknow University, Lucknow. Prof. Agarwal was father of Special Functions in India. He was a gem among mathematicians. His 3-volumes "Resonance of Ramanujan's Mathematics" are considered unique. Apart from these volumes, he contributed in the fields of q-series, integral transforms, mock theta functions, continued fractions and combinatorics.

The modus-operandi of selection of the awardee will be on the lines of Nobel Prize, Abel Prize, Fields Medal, Dnyanpeeth award et al. There are plans to award this prize annually and preferably at the time of Inauguration of the Annual Conference of the Indian Mathematical Society in the auspicious presence of constitutional heads such as the President, Vice- President of India. It may be recalled that the Annual Session of the Indian Science

Congress Association is inaugurated every year on 3rd January by the Hon. Prime Minister of India.

It is with a fervent request, the Samiti appeals to all mathematics lovers to contribute to this Ganit Ratna Award. For contribution / donation, one may contact on the e-mail address: bnwaph@math.unipune.ac.in or waphare@yahoo.com.

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