SECRETARY’S REPORT

It gives me great pleasure to present a compilation of events of IDLS during the year 2016.

We have organized various educational events viz., conferences, top of the bench, workshops, quiz, seminars, memorial/public lectures, science fair for school children, PhD poster symposium and in particular demonstration in chemistry for ‘O’ & ‘A’ level high school and Inter students.

We have not only created awareness among the younger generation but also attracted many students to take up the chemistry as their core subject to study in the coming years.

I would like to acknowledge all Office Bearers & Committee members of RSC-IDLS for their help and encouragement in conducting all these educational activities during the year 2016.

My sincere thanks to the parent body RSC-UK for their excellent support given to us in organizing all these activities and in particular Ms Comte, Dr Vibhuti Patel and Dr Hillary White, and Networks

Finally I extend my thanks to Mr. Rajesh Parishwad and Dr Abhiram Prabhu, at RSC, Bengalure, for their constant advice and support received at different times during the year 2016.

FOREWORD

It is with a great satisfaction on behalf of RSC-IDLS this annual report is presented as a number of programs involving school children, under graduate, graduate and Ph.D students and public lectures were organized spreading the importance of chemical sciences to various sections of society.

I really congratulate Prof. Peesapati, Hon. Secretary RSC Deccan Section for his great vision in planning various events and organizing them highly professionally.

We look forward on behalf of RSC Deccan Section for more active participation of all members.

MESSAGE

2016 is a very eventful year for India Deccan Section as we have organized variety of programmes for the benefit of school, college and university students, research scholars, women and general public. All these programmes were organized to commemorate the 175 years celebration of Royal Society of Chemistry and our Section is one of the very active sections of RSC. On behalf of all the members of India Deccan Local Section, I appreciate the efforts of Prof Peesapati for making our Section unique in the RSC community. Now it is time for all of us to plan for innovative programmes during 2017. In this context, I request all the members of our section to come forward and support the forthcoming events of our Deccan Section.
EVENT-01: ONE–DAY WORKSHOP ON “TOP OF THE BENCH (HANDS ON EXPERIENCE) IN CHEMISTRY FOR 10+2 & INTER STUDENTS AT RIPER-ANANTAPUR ON 02-01-2016 ”

The day started with welcome address by Dr. Y. Padmanabha Reddy, Principal, RIPER and introductory remarks by Prof. V. Peesapati followed an inspiring lecture by Dr. U. N. Das on “Chemistry of Exercises” wherein the link of health with exercise and importance was explained with biochemistry view.

Prof. V. Peesapati demonstrated the following experiments involving students; 1) pH of various solutions using Red Cabbage Indicator 2) Identifying the given unknown compounds (acid/base/neutral) 3) Endothermic and Exothermic reactions 4) Purification of organic compound by recrystallization and 5) Synthesis of an ester and identification by fragrance 6) Boiling an egg in cold water 7) Burning of a handkerchief with a matchbox 8) Elephant’s toothpaste 9) Volcano reaction and 10) Genie in a bottle. Dr. M.V. Jyothi and P. Venkatesh Coordinated practical session.

RSC-IDLS gave away prizes for the winners and distributed participation certificates to all.

FEED BACK of total 56 students

- Excellent = 41
- Very good = 11
- Good = 04

EVENT-2: ONE DAY SEMINAR ON “CHEMISTRY- KEY TO SUCCESS” AT JAAGRUTHI DEGREE & PG COLLEGE, BHONGIR, TELANGANA ON 23-01-2016”

There were 3 invited guest lecture’s delivered by Prof. P S N Reddy on “Biomimicry-A Route to Innovation”, Dr. Ch Krishna Kumari on “Indispensable Abrasives” and Dr R B N Prasad on “Role of Oils & Fats in Daily Life”.

Afternoon session: Quiz program was conducted by Prof. V Peesapati. RSC-IDLS gave away prizes for 1st, 2nd and 3rd winners of the quiz program and all participants were given certificates.
EVENT -3: PADMABHUSHAN PROF. T R SESHDRI (FRS FNA) MEMORIAL LECTURE AT RBVRR WOMEN’S COLLEGE, HYDERABAD ON 06-02-2016

The program started with releasing the book on “Prof. T R Seshadri - A Great Visionary” by Dr. Muthyam Reddy, correspondent, RBVRR Women’s College. The book is edited by Prof. V Peesapati. This was followed by guest lecture by Dr RBN Prasad on “Chemistry Discoveries that changed the world”. The program was attended by RSC –Deccan Section members, PG Chemistry students and staff members of the college.

Event-4: AGB MEETING OF THE RSC-IDLS-2016 AT R B V R R Women’s College, HYDERABAD ON 06-02-2016

Names of the Office Bearers for the year 2016:

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<th>Position</th>
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<tr>
<td>Chairman</td>
<td>Dr. Y. Anjaneyulu</td>
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<td>Vice Chairman</td>
<td>Dr. R. B. N. Prasad</td>
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<td>Secretary</td>
<td>Dr. V. Peesapati</td>
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<td>Treasurer</td>
<td>Dr. S. Sreelakhami</td>
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Executive Committee Members:

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<td>5.</td>
<td>Mr. P. Venkatesh</td>
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<td>Dr. B. Mandava</td>
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<td>Dr. Ravindra V singh</td>
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<td>Dr (Mrs) Ch. Krishnakumari</td>
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<td>Dr. V. Ravinder</td>
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<td>Dr. S. Ramakrishna</td>
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<td>Dr. (Mrs) M. Jyothi</td>
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<td>12.</td>
<td>Dr (Mrs) K. Radha</td>
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Dr. (Mrs) Ch. Krishnakumari delivered a talk on “Interesting facts about Raman and ‘Raman effect”’. Prof. A. VaradaRajulu - “Plastics – Prevention methods to control atmospheric pollution; Biodegradable composites and nano composites”. Prof. V. Peesapati - “Hazards of Smoking” and also explained chemistry through practical demonstration “Fun with Chemistry”. Students enjoyed the sound and colours generated in chemical demonstration, Mr. P Venkatesh - “Quiz programme”, Prof. C. Rambabu - “Green Synthesis”, Prof. U.V. Varadaraju - “Energy”, Prof. K. Hanumantha Rao - “Interesting aspects in basic Physics”, Prof. P. Appala Naidu - “Role of Plasmas in Science & Technology”, Director- RGUKT, and faculty members of chemistry and physics sincerely appreciated Prof. V. Peesapati, and RSC members for initiating this scientific event on the eve of science day.

Around 450 Intermediate students (‘A’ Level) participated in the event. RSC-IDLS gave away prizes for the winners of the quiz program and distributed certificates to all participants.
EVENT – 6: “FUN WITH CHEMISTRY” AT GOVERNMENT HIGHER PRIMARY SCHOOL (GHPS), BOMMASANDRA, BANGALORE ON 19-03-2016

Interactive lecture on “Air Pollution” by Dr. Ravindra V Singh was followed by plantation in the school premises. Demo by Mr. P. Venkatesh (Eg. Volcano, Elephant’s tooth paste, Genie in a bottle, Fire with glycerol, pH checking demonstration, Boiling egg in cold water etc); Quiz program for 7th and 8th class students; Prizes and certificates distributed by RSC for the winners and participants.

EVENT-7: RSC-IDLS INQUISITIVE SCIENCE FORUM (CELEBRATING 175TH ANNIVERSARY OF RSC-LONDON) AT NAGARJUNANAGAR WELFARE ASSOCIATION HALL, TARNAKA, HYDERABAD FROM APRIL-MAY 2016

Prof. Y. Anjaneyulu, Chairman, RSC-IDLS, inaugurated the science forum. Prof. Peesapati, explained briefly the structure of RSC and importance of science forum for school children.

Dr. R. B. N. Prasad, Vice-Chairman, RSC-IDLS, inspired students through his talk on the “Scientific Achievements of Nobel Laureates”. On 30th April, 2016, Prof. K S Sastry - “Acids And Bases”. Prof A. Varadarajulu - “Biodegradable Polymer Composite Films from Renewable Sources for Packaging and Medical Applications”. On 7th May, 2016, Prof. Adinarayana – “Concepts of chemistry” through demonstrations involving students. Prof. Peesapati explained the “Principles of exothermic, endothermic, and oxidation-reduction reactions through demonstrations and also using red cabbage extract as an excellent indicator for testing acid/ base reactions”.

On 14\textsuperscript{th} May, 2016, Dr. (Mrs) K K Chaganty gave a talk on “Play with Periodic Table of Elements”, Dr. B Rakeshwar – “Importance of chemistry not only in daily life but also as a lifeline for drug discovery and development”. Prof. Peesapati - explained shapes of simple molecules by showing working molecular models and showed few experiments. On 21\textsuperscript{st} May, 2016, Prof P S N Reddy - “Bio-mimicry’. Dr B Rupavani – “Serendipitous new inventions”. During the afternoon session, – Quiz program by Dr Peesapati and Mr Poojari Venkatesh

On 28\textsuperscript{th} May, 2016, Dr. USN Murthy addressed the students on the “Importance of research in chemical and biological sciences for the development of drug discovery and other important fields and stressed the role of chemistry in everyday life”.

RSC-IDLS has distributed prizes for winners/runners in the quiz/puzzle and word search competition and certificates to all the participants. \textbf{Number of students participated:} 45 (each day); \textbf{Level:} 6\textsuperscript{th} to 12\textsuperscript{th} Grade Students (Age group 10 to 16). Majority of the students appreciated the science forum and termed it “Excellent Program”

\textbf{EVENT-8: RSC - IDLS SCIENCE TOUR AT KBG VIDYALAYAM (GOVERNMENT SCHOOL), MOTUMARLA (A REMOTE VILLAGE) IN ANDHRA PRADESH (STATE) ON 08\textsuperscript{TH} JULY, 2016}

Prof. Peesapati briefed about RSC and it’s activities and demonstrated exciting chemistry experiments involving students. and also explained chemistry, molecular structures (3D) using molecular models.

Mr. P. Venkatesh conducted quiz competition for 9\textsuperscript{th} and 10\textsuperscript{th} class students. RSC-IDLS gave away prizes and certificates to quiz winners and certificates to all participants.
**EVENT-9: ROYAL SOCIETY OF CHEMISTRY YUSUF HAMIED INSPIRATIONAL CHEMISTRY PROGRAMME ORGANIZED AT RIPER-ANANTHAPUR, ANDHRA PRADESH STATE**

**Dated. 09 & 10 July, 2016**

Around 42 science teachers attended the two days training program. All the participant teachers expressed their happiness about the outstanding quality of the training program.

**EVENT-10: SYMPOSIUM ON “RECENT ADVANCES IN CHEMICAL AND BIOLOGICAL SCIENCES” AT GAYATHRI VIDYA PARISHAD EDUCATIONAL INSTITUTE, VIZAG ON 15-07-2016**

Prof. UN Das spoke on “Drug development for Cancer & Diabetes”, Prof. Anjaneyulu delivered a lecture on “Emerging nano-materials and its applications” and Prof. Peesapati gave a talk on “How to write a research paper for publication”. RSC-IDLS honored the guest speakers.

**EVENT-11: RSC (LONDON) – IDLS “SCIENCE EVENT – FUN WITH CHEMISTRY” AT ENDEAVOUR’S INTERNATIONAL SCHOOL, BANGALORE ON 05/08/2016**

Dr. Pintoo Ganguly addressed the students on “Chemistry and Quality of Life” followed by quiz program conducted by Mr. P. Venkatesh.

Prof. V. Peesapati demonstrated exciting chemistry experiments with the help of Mr. P Venkatesh. RSC-IDLS gave away prizes and certificates to quiz winners and certificates to all participants.
EVENT-12: “SCIENCE FAIR ON CHEMISTRY IN FUTURE” FOR SCHOOL CHILDREN AT CSIR-IICT ON 20-08-2016

Dr S Chandrasekhar, Director, CSIR-IICT inaugurated the Science Fair and delivered inaugural address.

During the valedictory function, Dr R B N Prasad, Vice Chairman summarized the Science Fair Event. About 42 schools have participated in the Science Fair. Very interesting exhibits covering environmental pollution, ozone depletion, noise pollution, hydraulic machine for routing the trees, low cost air purifier, water purification systems employing variety of adsorbents, solar irrigation, bio-digestors, hydroponic cultivation, novel foods, importance of specialty chemicals in daily life, bio-plastics etc.

The best exhibits were awarded with first, second, third and five consolation prizes. Mementoes were given to the top three schools in addition to certificates to all student participants.


Prof. Peesapati welcomed the teachers and explained the importance of Dr Yusuf Hamied Teacher Training program for improvement of science education in Indian schools. 45 School Science Teachers have participated in two days work shop. Most of the teachers who attended the work shop expressed their gratitude to RSC for conducting excellent training program and providing work books.
EVENT-14: ROYAL SOCIETY OF CHEMISTRY YUSUF HAMIED INSPIRATIONAL CHEMISTRY PROGRAMME UNIVERSITY COLLEGE FOR WOMEN, KOTI, HYDERABAD FROM 26-27TH AUGUST 2016

45 Science teachers have participated in two days teacher training programme. All teachers expressed their gratitude to RSC for conducting practical training program in chemistry and providing teaching material.

EVENT-15: “SCIENCE EVENT - FUN WITH CHEMISTRY” AT NATIONAL PUBLIC SCHOOL, IGGLALUR, BANGALORE ON 24TH SEPTEMBER, 2016

Prof. Peesapati briefed about RSC and its activities. Dr. Ravindra V Singh gave a talk on “Igniting Passion for Science: Chemistry in Everyday Life” followed by quiz program by Mr. P. Venkatesh.

Prof. V. Peesapati demonstrated few chemistry experiments and also explained chemistry behind them. Students from 9th and 10th classes displayed demos/working models on science projects. Dr. Vibhuti Patel, International Development Manager, India and Mr. Rajesh Parishwad, RSC-India representative interacted with the students and gave away prizes to the quiz winners and certificates to all the participants.

EVENT-16: “SEMINAR ON CHEMICAL SCIENCES AND ITS APPLICATIONS” AT KESHAV MEMORIAL INSTITUTE OF SCIENCE AND COMMERCE (KIMSC), HYDERABAD ON 28-09-2016

Prof. Peesapati explained the aims and activities of Royal Society of Chemistry. An invited lecture was delivered by Dr (Mrs) Ch Krishna Kumari on “Applications of Abrasives in Daily Life” by giving various examples of abrasives used in industry and at home, followed by Prof. A
Varadarajulu on “Bio-degradable polymer composites”. In the afternoon session, a chemistry quiz was conducted by Prof. V Peesapati. RSC-IDLS gave away prizes 1st, 2nd, and 3rd winners of the quiz program and certificates to the participants. Over 150 graduate students participated.

EVENT-17: TOP OF THE BENCH FOR B.Sc. STUDENTS AT ST. ANN’S COLLEGE FOR WOMEN, MEHDIPATNAM, HYDERABAD ON 01-10-2016

The aim of the work shop is to encourage students to face challenges at the bench as well as analytical and problem solving. The morning session has started with synthetic experiments being guided to prepare Aspirin to allow students to acquire practical skills. At the start of the program, the students are addressed by Prof. Peesapati highlighting the importance of practicals in chemistry, followed by Dr Sister P Amrutha, Dr K Radha, Dr. K. Radhika, Dr RBN Prasad, and Dr Y V D Nageswar.

In the afternoon session students were asked to attempt grid templates, word search, name of the reaction, acid/bases concept map, Bingo, crossword puzzle and knowledge filled games in chemistry.

At the end of the session, Prof. Peesapati conducted quiz program. 44 students from different colleges have participated in the top of the bench program. RSC-IDLS gave prizes for 1st, 2nd and 3rd prizes for the winners of the top of the bench challenge. All students received Participation certificates.


RSC-IDLS in association with University College for Women, OU, as a part of 175th anniversary celebrations conducted a national PhD poster symposium: at Koti women’s college, Hyderabad. The symposium provided a platform for fruitful idea triggering scientific discussions, exchange of thoughts, sharing of knowledge and most importantly networking for PhD students.

Prof Peesapati explained to students & staff, the structure of RSC, aims, advantages of becoming a member of RSC.
Prof. Uday Maitra, has delivered a talk on “Applications of a soft photo luminescent material for enzyme sensing”. Followed by Dr. A Kamal, on “Natural products as a source of new drugs”. Finally Dr. Abhiram Prabhu explained the networking benefits for finding jobs with chemistry background. 50 Research Scholars were presented their work through posters on various topics on medicinal & organic chemistry and related areas.

Prof Varadarajulu, Prof. Rama subba Reddy and Dr Y V D Nageswar acted as judges and finalized the top 3 best papers out of 50 presentations, for prizes.

Prizes were given to the best posters & participation certificates were given to all participants.
Followed panel discussion by Dr Rakeshwar Bandhichor, Dr Reddy’s Laboratory, Dr Ravindra V Singh, Merck Life sciences, Dr Vijaya Suryanarayan, GVK Biosciences, Ms Farzana Nahid, Dupont on “Trends and skill set requirements in specific sectors in chemical industry in India” and clarified doubts raised by students on chemistry careers.

In the afternoon session Dr Abhiram Prabhu, RSC External Relations (India) gave a over view on “Resume, interview preparation and Networking to find the best jobs”.

Dr K. Radha, Chemistry Department proposed vote of thanks.

Few pictures of the event are enclosed.

**EVENT 20: PUBLIC LECTURES 2016.**

RSC-IDLS has conducted general lectures by invited speakers on different subjects, viz., importance of chemical & biological sciences, health related topics, energy and environmental issues etc., at different institutions, universities, colleges and public platform during the year 2016.
EVENT: 21: \textbf{“WORKSHOP AND INDUSTRIAL VISIT”}.

I am pleased to inform students members of RSC and PG students of Raghavendra Institute of Pharmaceutical Education & Research (RIPER) have conducted one day workshop on pharmaceutical analysis and organized a guest lecture cum demonstration on ‘Impurity profiling of pharmaceuticals” by Dr. K Raghava Reddy, from Hetero laboratories, Hyderabad, on 14.12.2016.

RSC Students members also visited pharmaceutical industries located in Ananthapur district, Andhra Pradesh.

We have received excellent feedback from RSC student members of RIPER and expressed happiness and thanks to RSC for their financial support.

Some pictures are attached.

EVENT-22: \\textbf{POSTER SESSION AND INDUSTRIAL VISIT.}

Student members of RSC students of St Ann’s College for Women, Mehdipatnam, Hyderabad have organized in association with RSC-IDLS, a poster session in Chemistry on 22nd December 2016. They have also visited pharmaceutical industries in and around Hyderabad. Students expressed happiness and conveyed thanks to RSC for their financial support.

Greetings from RSC-India Deccan Local Section

Report by: Prof. V. Peesapati, Hon. Secretary, RSC-IDLS; rscdc.vpeesapati@gmail.com