

# A.S.D.GOV'T. DEGREE COLLEGE FOR WOMEN (A)

(Accredited with 'B' Grade by NAAC)

Jagannaickpur, KAKINADA – 533 002, A.P.



UGC Sponsored National Symposium on,

## **“Discovery of Periodic Table and Scientific Developments: The Incredible Contribution of Dmitri Mendeleev”**

held on 02<sup>nd</sup> March 2019

## **SYMPOSIUM REPORT**

The Department of Chemistry has organized a National Symposium on 02<sup>nd</sup> March 2019. This is to mark the 150<sup>th</sup> year of the Discovery of Periodic Table in 1869 by Dmitri Ivanovich Mendeleev, a Russian Chemist.

The declaration of 2019 as the International Year of Periodic Table of Chemical Elements (IYPT-2019) was proclaimed by the United Nations General Assembly on 20<sup>th</sup> December 2017. To commemorate the discovery of periodic table, various organizations, scientific institutions, educational institutions have been organizing a variety of events across the globe. Under this scenario, the Department of Chemistry of ASD Govt. College for Women (A), is very much privileged to organize this National Symposium by inviting various stalwarts of Chemistry from various parts of India to share their innovations/experiences on the discovery of Periodic Table and its contribution for the development of Science and Chemistry as well on the topic entitled **“Discovery of Periodic Table and Scientific Developments: The Incredible Contribution of Dmitri Mendeleev”**.

Prior to the organization of this symposium, the proposed event was registered and uploaded in UNESCO/IUPAC Web portal. This event details can be viewed in UNESCO/IUPAC through Google maps also.

The event was planned to organize with the financial aid from UGC-Autonomy grant approved and released by the Head/Principal of the Institution as well as the President of this event Dr. D. Ratnagiri Usha.

The minutes of the symposium deliberations followed as per the programme schedule attached herewith. The symposium was convened with the Inaugural session, Technical Sessions, Oral presentations and Valedictory sessions.

### The Resource persons:

S.No.	Name / Designation of the Resource Person	Discussion Theme
1	<b>Prof. P. Suresh Varma,</b> Rector – Adikavi Nannaya University, Rajamahendravaram.	<b>‘Importance and Relevance of Chemical Elements’</b> <b>(Keynote Address)</b>
2	<b>Dr. B. Sreedhar,</b> Senior Principal Scientist – IICT, Hyderabad, Telangana.	<b>‘The Discovery of Periodic Table and Scientific developments – The Technological breakthroughs’</b>
3	<b>Dr B. Jagan Mohan Reddy</b> Head/ Department of Chemistry, Adikavi Nannaya University, Rajamahendravaram, A.P.	<b>‘Incredible contribution of Dmitri Mendeleev in the Development of World Science’</b>
4	<b>Dr. B. Sreedhar,</b> Senior Principal Scientist – IICT, Hyderabad, Telangana.	<b>‘Role of Chemical Elements in the Development of Nano Science’</b>

The Symposium was formally inaugurated by the President of the programme/**Principal** of the College **Dr. D. Ratnagiri Usha**, Chief Guest **Prof. P. Suresh Varma**, Guests of Honour **Dr. B. Sreedhar, Dr B. Jagan Mohan Reddy**, and Vice-Principal Mrs. **M. Suvarchala**, Convenor **Dr. D. Chenna Rao**, Organizing Secretary Mrs. **V. Ananthalakshmi**, faculty of Chemistry Department, Participants from different parts of the Country, Students, Press and Electronic Media.

A total of 41 participants from different parts of the country have attended the Symposium. 11 abstracts (excluding resource persons) were received and 05 oral presentations were delivered by the participants.

Nature of Symposium	Number of Participants Attended		
	Local	Outstation	Total
National	30	11	41

The pre-lunch session started with a welcome address by the Convenor / In-Charge of Chemistry Dr. D. Chenna Rao. In the welcome address he stressed the importance of UN declaration and how United Nations desires to focus on the indispensable role of Chemistry in promoting sustainable development by providing solutions to global problems in **Energy, Education, Agriculture and Health Care**. He further emphasized that the Development of periodic table of chemical elements, in the tabular arrangement is based on periodic trends of properties, is a significant scientific milestone in the scientific advancement of Mankind. The periodic system, which was discovered by Dmitri Mendeleev in 1869, also coincides with centenary of the International Union of Pure and Applied Chemistry (IUPAC100).

After the welcome address, the **President / Principal Dr. D. Ratnagiri Usha** delivered the opening remarks by congratulating the Chemistry Department for timely organizing/celebrating the event on 150<sup>th</sup> year of the discovery of periodic table of Chemical Elements. She further said 'it is proud to say that this institution is the first institution in the entire state of Andhra Pradesh to organize this event on 02<sup>nd</sup> March 2019', which has been recognized/viewed by UNESCO/IUPAC and the entire Globe (<https://www.google.com/maps/d/viewer?mid=1SYHdOsPaKN3NE6Wx-BzEcRPagrYijOOh&ll=16.939829299999968%2C82.23802990000002&z=8>). The participants may be exposed to ample of information with the deliberations on the theme and sub-themes as well.

### **Sub-Themes:**

- Importance of Periodic Table for Scientific Developments
- Applications of Chemical Elements in Chemistry and Health
- The Evolution of Chemistry and Drug Discovery
- The Green revolution and Aftermath
- The Concepts of Periodic Table in Chemistry Education
- Role of Chemical Elements in Energy efficient processes

After the opening remarks, the ceremonial/key note address delivered by **Prof. P. Suresh Varma**. In his address, Prof Varma has stressed upon the importance of periodic table of Chemical elements. He expressed that it very hard to imagine the nature and properties of Chemical elements and it would have been very difficult to achieve scientific and technological developments without the discovery of periodic table of chemical elements.

After the Keynote address, the technical session started with Dr. B. Sreedhar, Senior Principal Scientist, Indian Institute of Chemical Technology (IICT), Hyderabad, Telangana. Dr. Sreedhar acted as resource person for two technical sessions such as Tech-Session I (11.30 AM – 12.30 PM) and Tech-Session II (2.00 – 3.00 PM). In his first lecture, Dr Sreedhar elaborated the chronological developments of the discovery of Chemical elements by various scientists and how Dmitri Mendeleev struggled and put efforts to arrange them as per their Nature, Physical and Chemical Properties in a systematic order. Dr Sreedhar's presentation was followed by Dr B. Jagan Mohan Reddy, Head/ Department of Chemistry, Adikavi Nannaya University, Rajamahendravaram, A.P.

Dr Jagan Mohan Reddy, in his presentation, stressed on the incredible contribution of Dmitri Mendeleev and how initially the elements have been arranged with a set of rules in the increasing order of their atomic weights by Mendeleev, who defined that “The Physical and Chemical Properties of Elements are the Periodic functions of their Atomic Weights”, which was later modified in terms of ‘Atomic Numbers’ by Mosley after the discovery/study with X-rays. This has been called the modern periodic law.

In the third Technical session, Dr Sreedhar emphasized on the importance of Nano materials and Nano Chemistry and how the chemical elements contributed for the development of Nano Science in the modern era of chemistry.

The Technical sessions were followed by Oral presentations and Valedictory function.

Valedictory Programme was started at 4.40 PM and continued up to 5.15 PM. The session was presided over by the Principal Dr. D. Ratnagiri Usha and Dr B. Sreedhar was the Chief Guest. Convenor of the Seminar delivered a brief report on the outcome of the seminar. Certificates were presented to the participants and feedback was obtained from the participants. The programme was concluded with vote of thanks and National Anthem.

**Dr. D. Chenna Rao**  
**Convenor / In-Charge of Chemistry**

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