A Report on

International Conference

Women in Science & Technology: Creating Sustainable Career

January 28-30, 2016





Organized By
Gujarat Technological University

In collaboration with

**BVM Engineering College** 

(An Autonomous Institution)
Managed by Charutar Vidya Mandal
Vallabh Vidyanagar, Anand, Gujarat, India-388120

### International Conference Women in Science and Technology: Creating Sustainable Career January 28 - 30, 2016 Held at BVM Engineering College, VV Nagar

#### Objectives of the Conference:

The 21st century women have stepped into a new era of awareness, independence and social responsibilities. There is need to initiate a movement towards women empowerment. Gender equality and women empowerment is the 3rd Millennium Development Goal expected to embark upon giving women their share in society and access to use of new technologies. Therefore, women's role in nation development and use of new technologies is extremely important.

Now at the beginning of the 21st century with the state of the world as it is, it is a crucial time for women to come together to make a difference. This conference, the first of its kind, is organized to bring all the stake holders together to discuss how to foster women's contribution to Engineering, Technology, Science, Management, Humanities and all other relevant fields.

The present conference was planned with a view to discuss various issues related to women & their role in Science & Technology in a view to create sustainable career. This international conference would provide a unique platform for the development of all stakeholders, by providing them opportunities to contribute towards the betterment of the economy & society. This International Conference helped to share and exchange ideas, identify and discuss options for overall development of women with the following themes.





#### Working For Gender Equality in Careers in Science & Technology

'Achieving gender equality' is an important part of the Sustainable Development Goals, adopted by the seventieth UN General Assembly in 2015. The SDGs have replaced the MDGs (Millennium Development Goals) on pt of January 2016. GTU is continuously working for gender equality at Colleges affiliated with GTU. Science & Technology provide some of the most interesting careers and it would be appropriate that women should take advantage of these opportunities and should contribute

equally to making a beautiful world for the coming generations. - Dr. Akshai Agrawal, Hon'ble Vice Chancellor, GTU

#### Women & Development

The Indian development model has yet to fully incorporate the important role played by women for propelling the socio-economic growth of the country. Across the globe, educating women and giving them the ability to stand on their own feet has been a priority. Empowered Indian women can be pioneer self-help groups and initiatives for creating positive social change in rural or underdeveloped areas. They can contribute significantly to the growth and development of India in multifaceted ways.



Women play a crucial role in initiating the advancement and growth of any society, in nations across the world. Charutar Vidya Mandal is always been supportive in context with Women education and development. -Dr. C. L. Patel, Hon'ble Chairman, CVM

#### <u>Promotion of the conference</u> (From first announcement up to the last extended date)

International Conference on "Women in Science & Technology: Creating Sustainable career" was organized jointly by Gujarat Technological University (GTU), Ahmedabad & Birla Vishvakarma Mahavidyalya (An Autonomous Engineering College), Vallabh Vidyanagar – the first engineering college in the state of Gujarat, during 28 - 30 January, 2016. Indian Society for Technical Education (ISTE) and Foreign Universities from Canada, Island, Russia, China, Germany and Norway were valuable collaborators in this mega Event.

The above purpose was found to be served on execution where the number of papers/Abstracts received at the conference exceeded 450. The manuscript submission was carried out through easy chair in which the manuscripts were received from the day the promotion of the International Conference began, i.e. from July, 2015. The last date for paper submission needed to be extended two times looking at the overwhelming response of the participants in the form of paper submission. The paper submission was conducted through easy chair and the registration needed to be done online by filling up the registration form as a google doc.

This conference provided a unique platform for the development of all female stakeholders by sharing and exchanging ideas, identify and discuss options for overall development of women. 473 manuscripts received till the last date of paper submission, 281 papers were accepted after peer review through the review panel. The review panel consisted of more than 100 reviewers of varied disciplines and expertise.

#### 28th January, 2016

#### Registration:

The International Conference began with the Registration process on 28th January, 09:00 am. The registration was arranged on the registration desk in front of BVM auditorium differently for the authors and participants of various institutes within and outside Gujarat as well as the International Delegates. Total 514 participants had registered for the conference.







#### Technical Inaugural

The Technical Inaugural Function of the conference was held on 28th January, 2016, 10:00 am.

Dr. Sandhya Chintala, Vice President, NASSCOM, Smt. Jayaben Thakkar, Former MP, Vadodara, Dr. B. G. Patel, Provost, CHARUSAT, Dr. A. K. Verma, Dean, R&D, Dr. D.G. Thakore, Coordinator TEQIP II, Dr. F. S. Umrigar, Principal, BVM, Prof. (Dr.) Indrajit Patel, Conference Chairman and Dr. Mehfuza Holia, Conference Coordinator were the dignitaries present on the dais. Dr. Sandhya Chintala congratulated the ICWSTCSC team for organizing the conference. Smt. Jayaben Thakkar enlightened the participants with her delightful speech and expressed her views on women empowerment and subjected the conference to be one such event to bring up the power of women. Dr. F.S. Umrigar, Principal, BVM Engineering College shared his views on this subject. He motivated all the participants by explaining the importance of such kind of programmes and their significance. Dr. Mehfuza Holia gave a formal vote of thanks.





### Keynote Speech by Dr. Sandhya Chintala, Vice President, NASSCOM

The Keynote Speech was delivered by Dr. Sandhya Chintala, Vice President, NASSCOM on Skill development of women in science and technology. She discussed different areas for skill development of women in science and technology such as higher education, career development, career progression and leadership positions. She emphasized that Skill gaps in women are a key constraint to innovation, hindering productivity growth and economic development. Dr. B. G. Patel, Provost, CHARUSAT had chaired the



session. As a mark of gratitude, a memento was presented to both the keynote speaker and the chair.



# Expert talk by BK Dr. Sunita Didi Chandak, International Management Consultant

Rajayoga Practitioner and Teacher at Brahma Kumaris, CEO, Spiritual Quotient Consulting Centre, Surat. Dr. Suntia Chandak discussed on the varied values of spiritual quotient and the means to organize the schedules of life to attain great success and thereby reach the eternal gain.

The Expert talk was followed by the technical sessions which were conducted in 9 parallel rooms and eminent personalities of the respective theme were invited to be the session judges.

### **Conference Inaugural Ceremony**

#### The Dignitaries on the Dias:

Conference Inaugural Function was held on 28th January, 2016 at 03:30 pm onwards. The Chief Guest of this program was Dr. Meera Ramnivas, IPS, Additional Director General of Police ,CID, Crime, Gujarat Guest of Honour, Smt. Geeta Goradia, Entrepreneur and Dr. Sunita Chandak, International Management Consultant along with Dr. C. L. Patel, Chairman- CVM Prin. S. M. Patel, Hon. Secretary- CVM Er. V. M. Patel, Hon. Jt. Secretary- CVM B.K. Dr. Sunitadidi Chandak, International Mgmt. Consultant, Dr. F. S. Umrigar, Principal-BVM, (Dr.) Indrajit Patel, Conference Chairman, Dr. Trupti Desai, Convener and Prof. Zankhana Shah, Convener had graced the event with their presence on the dias.



#### **Inaugural Session**

Dr. Namita Sathe had welcome all on behalf of Gujarat Technological University and BVM Engineering College. All dignitaries on the Dias & off the Dias had joined for lightning of the lamp as per our Indian tradition. Floral welcome was done by Core committee members of the ICWSTCSC for all the dignitaries.



#### Welcome & Wishes

Prof. (Dr.) Indrajit Patel welcomed all. He briefed about vision of this conference along with its aim and objectives. He gave all details about the conference. He explained how this conference would help to provide a unique platform for the development of all female stakeholders by sharing and exchanging ideas, identify and discuss options for overall development of women. All the dignitaries has blessed and wished the conference by their motivation speech.

Conference Abstract book and E- Proceeding of the conference was released by the Dignitaries on the Dias.



Dr. Meera Ramnivas shared her views on how the women in the past and the present are empowered in India and also suggested that women herself should protect her own self. Smt. Geeta Goradia shared her own experiences on how a woman can emerge as a successful entrepreneur through her untiring efforts. Dr. C. L. Patel, Hon'ble Chairman-CVM showered his blessings for the success of the conference and congratulated team ICWSTCSC to organize such a conference. He also inspired all to arrange more and more such events and to take part in programmes aiming at women empowerment. Dr. F.S. Umrigar motivated all the participants by elucidating the importance of such kind of programmes and their significance. Dr. Trupti Desai gave a formal vote of thanks.













#### Technical (Paper Presentation) Sessions

39 parallel sessions were planned during these three days for the smooth conduction of the conference paper presentations. Each session was chaired by eminent personalities from the different sectors of the respective area of expertise. Total 227 technical paper has been presented during the conference. All the papers has been judged by the session chair on different parameters.

Theme No.	Theme	Paper Published	Paper Presented
1.	Women contribution in Technical & Higher Education	24	19
2.	Challenges& Opportunities for Women in 21st Century	20	16
3.	Women & Entrepreneurship	27	23
4.	Leadership skill of women for Nation's development	07	06
5.	Women Empowerment: Today's scenario	38	32
6.	Women: Economy & Management	08	07
7.	Professional Women: Achievements & Concerns	10	08
8.	Women's Health & safety	31	24
9.	Women's participation for Rural/Urban Upliftment	08	07
10.	Women: Bridging gap between Social liabilities & Professional responsibilities	09	07
11.	Contribution of Women in Social & Economic Change	14	11
12.	Women participation in labour force and sustainable development	06	05
13.	Role of women in growth of Agricultural sector	08	06
14.	Women & Research	41	31
15.	Role of women in sustaining national Heritage & all other related to women development	07	05
16.	Role of Men in Women Development & all other Relevant Fields	23	19

The presented paper was evaluated by the session chair by measuring the same with different parameters. At the end of the conference the evaluating committee has summarized the winner of the best paper from the each theme from the session chair's comment and marking.



# Day:2 Expert talk by BK Dr. Dilip K. Pithadia, Pithadia Foundation, USA

Mr. Dilip K. Pithadia of - Pithadia Foundation, Detroit, USA delivered an expert talk on Challenges and Opportunities for women in 21st Century. Women in 21st Century have been discussed with respect to



the different factors such as media, leadership, entrepreneurship, skill development skills, labour forces etc. New ideas to enhance the process of women empowerment and the various laws and organizations working for the same were discussed at length.



# Expert talk by Dr. Nayana Patel, Gynacologist, Aanksha Hospital, Anand

Dr. Nayana Patel, Gynacologist, Aakanksha Hostipals, Anand delivered a talk on women health issues and concerns. Women health issues from the childhood were discussed .She emphasized that every woman has access to knowledge related to the spectrum of women's health issues, not only about her reproductive system, but about all aspects of her body. She advised women to take charge of their own bodies and that they comprehend how they can maximize their

personal health and fitness. She insisted all men to understand and are supportive of the health concerns of the women.

# Day: 3 Expert talk by Dr. Renu Bapna, Joint Secretary, Higher education, Secretariat, Government of Rajasthan, Jaipur.

Dr. Renu Bapna, Joint Secretary, Higher education, Secretariat, Government of Rajasthan, Jaipur. Her lecture focused on the physical security of women employees in an organization and the safety of female employees, whilst they are on the job/ inside office premises.



Empowering Women is a prerequisite for creating good nation, when women are empowered society with stability is assured. Empowerment of women is essential as there value systems lead to the development of a good family, good society and ultimately good nation.

#### Valedictory function

Conference Valdictory Function was held on 30th January, 2016 at 03:30 pm onwards. Guest of Honour, Dr. J. C. Lilani, I/C Registrar – GTU, Ms Hetal Patel, Dy SP - Anand along with Expert Speaker Dr. Renu Bapna, Er. V. M. Patel, Hon. Jt. Secretary-CVM Dr. F. S. Umrigar, Principal-BVM, (Dr.) Indrajit Patel, Conference Chairman, Prof. Kaushika Patel, Coordinator, Prof. Dharita Patel, Organizing Secretary and Ms Jagruti Shah, Organizing Secretary had graced the event with their presence on the dias.



All Dignitaries congratulated to committee for the successful organization of the conference. Prof. (Dr.) Indrajit Patel gave summery of the conference. Ms Hetal Patel shared her own experience and journey towards Deputy Superintendent of Police. Dr. J.C .Lilani shared various activities performed at GTU for the noble cause of women development and role of women in nation development.

Dr. Jagdish Rathod, Technical session coordinator had declared best paper awards in each theme. Dignitaries has gave awards to recipient of best paper. Total 21 author has awarded best paper among the 16 theme. The overall function was smoothly accomplished under the esteemed guidance of Prof. A. A. Shaikh. Ms Jagruti Shah gave formal vote of thanks to all.

OUTCOME: This was the first of its kind conference where more than 500 delegates come cross and used the platform to discuss various issues and solutions for the women's development in different sectors. Different areas where concern is more needed are as follows: Women and poverty, Education and training of women, Women and health, Violence against women, Women and armed conflict, Women and the economy, Women in power and decision-making, Institutional mechanisms for the advancement of women, Human rights of women, Women and the environment and The girl child. The conference helped stakeholders to discuss various issues related to women & their role in Science & Technology in a view to create sustainable career. This unique platform gave benefits all stakeholders, by providing them opportunities to contribute towards the betterment of the economy & society.

## Glimpse of Best Paper Awards:



#### Glimpse of the Messages Received:

शमीमा सिद्दिकी SHAMIMA SIDDIQUI भारत के राष्ट्रपति की उप प्रेस सचिव Deputy Press Secretary to the President of India

28-30, 2016.

the success of the Conference.



MESSAGE

(GTU) and Birla Vishvakarma Mahavidyalaya are jointly organising an International Conference on "Women in Science

and Technology: Creating Sustainable Career" during January

to the organisers and participants and sends his best wishes for

The President of India, Shri Pranab Mukherjee, is

The President extends his warm greetings and felicitations

to know that the Gujarat Technological University

राष्ट्रपति सचिवालय, राष्ट्रपति भवन, नई दिल्ली- 110004. PRESIDENT'S SECRETARIAT, RASHTRAPATI BHAVAN NEW DELHI - 110004.



प्रधान मंत्री कार्यालय नई दिल्ली - 110011 PRIME MINISTER'S OFFICE New Delhi - 110011



#### MESSAGE

The Prime Minister is happy to learn that Gujarat Technological University (GTU), Ahmedabad and Birla Vishvakarma Mahavidyalya are jointly organising International Conference on "Women in Science & Technology: Creating Sustainable Career" during 28-30 January, 2016.

On this occasion, best wishes to the organisers and participants.



8 January, 2016 New Delhi





Dr. 04/01/2016



MESSAGE

"The modern women have come forward in to a new era of independence, awareness and social responsibilities. It is a need to initiate a movement towards women empowerment. Women's role in development and use of new technologies is extremely

It is appreciated that the Gujarat Technological University, (GTU) Ahmedabad in collaboration with Birla Vishvakarma Mahavidyalya (BVM) Vallabh Vidyanagar is organizing an International Conference on "Women in Science and Technology: Creating Sustainable Career" during January 28-30, 2016. Indian Society Technical Education (ISTE) and foreign Universities are also collaborators in this mega event.

I extend my best wishes for the success of this conference and welcome all the participants on the land of Mahatma and Sardar.

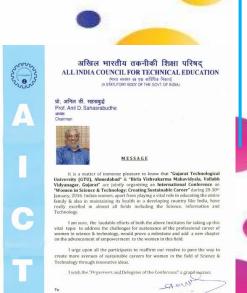
With best compliments.

Anomali Buter (Anandiben Patel)

Prof. (Dr.) Indrajitbhai Patel, Conference Chairman, International Conference-Women in Science and Technology: csc, Birla Vishvakarma Mahavidyalaya Engineering College, Vallably Vidya Nagar, Anand-388120.
 Email: inpatel3/4/ggmail.com

Anandiben Patel





भारतीय तकनीकी शिक्षा संस्था INDIAN SOCIETY FOR TECHNICAL EDUCATION



PROF. PRATAPSINH K. DESAI

I am extremely glad to know that Gujarat Technological University, Ahmedabad and B.V.M. Engineering College, Vallabh Vidyanagar are jointly organizing an International Conference on "Women in Science & Technology: Creating Sustainable Career" during 28-20 Januty.2016 and releasing a Conference Proceedings to

best wishes for the <u>Proceedings</u> and hope that it comes of attractively with thought provoking witeups on technical education.



30-12-2015



(Anil D. Sahasrabudhe)

### **National Academic Partners**



**All India Council for Technical Education** (AICTE),

New Delhi, India



**Indian Society for Technical Education** (ISTE),

New Delhi, India



Institute of Engineers (India),

Kolkata, India



Institute of Plasama Research (IPR),

Gandhinagar,



Department of Science and Technology (DST),

Government of Gujarat, Gujarat India



**Gujarat Council on** Science & Technology (GUJCOST),

Gandhinagar, Gujarat, India



**National Project Implementation Unit** (NPIU), India.



**State Project Facilitation Unit** (SPFU),

Government of Gujarat, Gujarat, India

### **International Academic Partners**



**Ural Fedral** University.

Russia



UNIVERSITY University of Prince Edward ISLAND Island Coards



**Laurentian** University Université Laurentienne

Laurentian University,

Canada



**Huazhong University** of Science and Technology (HUST),

China



Wismar University,

Germany



JIANGSU University,



Christchurch **Polytechnic Institute** of Technology (CPIT),

New Zealand

#### Glimpse of the Feedback from the Participants:



congratulate conference team for the successful completion. All the technical session was very well organized and served to the objective and the theme of the conference. The hospitality and all the arrangements was excellent. I am really grateful to you for providing an opportunity to participate in this conference.

> **Dr. Rohini Wittke,** University of Waterloo, Canada

This international conference was truely a great platform for all academicians for knowledge sharing and specially the whole management during the days of conference was outstanding. The hospitality which all delegates got is really can't be explain. I heartily express my deep sense of thanks to the whole team of BVM for organizing this grand successful International Conference.

Ms Shivangi Shukla

It gives me immense pleasure to share my feedback with you. Firstly I would like to congratulate All of you for your great success of the conference. Secondly I would like to say that we as participants, students, guests really enjoyed the conference especially the hospitality if i talk about was the best part in your team. The values of your college was visible very clearly just like a pebble in clean water. Being a girl I felt very safe and homely. Thank you soo much and keep up the good work. The conference was about women which also included safety of women and throughout the conference we could sense and feel the objectives behind the conference. So thank you so much.

Neha Agrawal, AITS, RAJKOT

It was my pleasure to attend the conference and the hospitality was wonderful. I really adored the activeness and promptness of all the volunteers.

Wish you all the best for future such events.

Ms Aasiya Topiwala, ISRO

I am conveying what I personally believe are the hard facts for all the team members. All the committee members have done a marvel work; the presence of work is highly appreciated and generates encouragement of powerful tool to shift perspective as it helps one to reach the target and goals. The well being culture developed in the entire team would be receiving back in a thousand fold as you have offered it to others in genuinely transforming the professional exchange of power of work which is noteworthy in the society. Appreciated works are like echos and are truly endless.

Congratulations to the entire team and to those who have given thought provoking ideas in the international conference to make it committed to the mission.

Prof. C.B. Mishra



On Behalf of Team ICWSTCSC:2016 Prof. (Dr.) Indrjít Patel, Dean, GTU Jagrutí Shah, OSD, GTU