

**ਡਾਇਰੈਕਟਰ ਜਨਰਲ ਸਕੂਲ ਐਜੂਕੇਸ਼ਨ-ਕਮ-ਸਟੇਟ ਪ੍ਰੋਜੈਕਟ ਡਾਇਰੈਕਟਰ  
ਸਰਵ ਸਿੱਖਿਆ ਅਭਿਆਨ ਅਥਾਰਟੀ, ਪੰਜਾਬ,**

ਪੰਜਵੀਂ ਮੰਜਿਲ, ਈ ਬਲਾਕ, ਸਿੱਖਿਆ ਭਵਨ, ਪੀ.ਐਸ.ਈ.ਬੀ. ਕੰਪਲੈਕਸ, ਫੇਜ਼-8, ਐਸ.ਏ.ਐਸ ਨਗਰ  
ਫੋਨ ਨੰ: 0172-5212364 Website: [www.ssapunjab.org](http://www.ssapunjab.org)

ਵੱਲ,

- (1) ਸਮੂਹ ਜ਼ਿਲ੍ਹਾ ਸਿੱਖਿਆ ਅਫ਼ਸਰ (ਐ.ਸਿ.), ਪੰਜਾਬ।
- (2) ਸਮੂਹ ਜ਼ਿਲ੍ਹਾ ਸਿੱਖਿਆ ਅਫ਼ਸਰ (ਸੈ.ਸਿ.), ਪੰਜਾਬ।
- (3) ਸਮੂਹ ਸਕੂਲ ਮੁੱਖੀ, ਪੰਜਾਬ।

ਮੀਮੋ ਨੰ : ਸਸਅ/ਐਮਸੀ/2018/ 34956  
ਮਿਤੀ : 09-08-2018

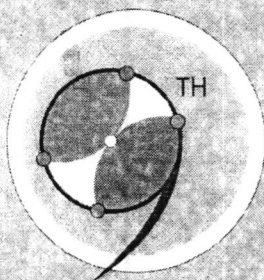
**ਵਿਸ਼ਾ :- 9th National Teacher Science Congress - Announcement.**

1.0 ਉਪਰੋਕਤ ਵਿਸ਼ੇ ਸਬੰਧੀ ਲਿਖਿਆ ਜਾਂਦਾ ਹੈ ਕਿ Vikram A Sarabhai Community Science Centre ਵੱਲੋਂ ਮਿਤੀ 14-16 ਦਸੰਬਰ 2018 ਨੂੰ ਅਹਿਮਾਦਾਬਾਦ ਵਿਖੇ ਨੌਵੀਂ ਨੈਸ਼ਨਲ ਟੀਚਰ ਸਾਇੰਸ ਕਾਂਗਰਸ ਦਾ ਆਯੋਜਨ ਕੀਤਾ ਜਾ ਰਿਹਾ ਹੈ। ਨੌਵੀਂ ਨੈਸ਼ਨਲ ਟੀਚਰ ਸਾਇੰਸ ਕਾਂਗਰਸ ਦਾ ਵਿਸ਼ਾ 'Design literacy for effective science communication by educators' ਹੈ। ਇਹਨਾਂ ਵੱਲੋਂ ਜਿਹੜੇ ਅਧਿਆਪਕ ਇਸ ਫੋਕਲ ਥੀਮ ਅਤੇ ਸਬ ਥੀਮ ਅਧੀਨ science education and communication 'ਤੇ ਆਪਣੇ innovative and original ideas present ਕਰਨ ਦੇ ਚਾਹਵਾਨ ਹਨ, ਤੋਂ ਪੇਪਰ ਮੰਗੇ ਗਏ ਹਨ। ਚਾਹਵਾਨ ਅਧਿਆਪਕ ਮਿਤੀ 6 ਅਕਤੂਬਰ 2018 ਤੱਕ ਆਪਣੇ ਪੇਪਰ ਸਮੇਤ ਰਜਿਸਟ੍ਰੇਸ਼ਨ ਫਾਰਮ [www.ntscindia.in](http://www.ntscindia.in) ਦੀ ਵੈੱਬਸਾਈਟ ਤੇ ਆਨਲਾਈਨ ਸਬਮਿਟ ਕਰ ਸਕਦੇ ਹਨ। ਨੈਸ਼ਨਲ ਟੀਚਰ ਸਾਇੰਸ ਕਾਂਗਰਸ ਵਿੱਚ ਭਾਗ ਲੈਣ ਲਈ brochure, guidelines ਅਤੇ registration form ਦੀ ਕਾਪੀ ਪੱਤਰ ਨਾਲ ਨੱਥੀ ਹੈ।

2.0 ਪੱਤਰ ਆਪ ਦੀ ਸੂਚਨਾ ਹਿੱਤ ਹੈ ਜੀ।



ਡਿਪਟੀ ਸਟੇਟ ਪ੍ਰੋਜੈਕਟ ਡਾਇਰੈਕਟਰ  
ਸਰਵ ਸਿੱਖਿਆ ਅਭਿਆਨ ਅਥਾਰਟੀ  
ਪੰਜਾਬ



# National Teachers Science Congress

14-16 Dec 2018 • AHMEDABAD

## CALL FOR PAPERS

The National Teachers Science Congress (NTSC) is an initiative of the National Council for Science & Technology Communication (NCSTC), Department of Science & Technology (DST), Govt. of India. NTSC aims at providing a platform to science and mathematics teachers to communicate their ideas, share new experiments in teaching methodology and science education and enhance their level of scientific awareness.

The 9<sup>th</sup> NTSC is being hosted by Vikram A Sarabhai Community Science Centre (VASCSC) during 14-16 December 2018 at Ahmedabad. Papers are invited from teachers/educators who wish to present innovative and original ideas in science education and communication, based on the subthemes under the focal theme of the event.

### FOCAL THEME

**Design Literacy for Effective Science Communication by Educators**

### SUB THEMES

- ❶ New and emerging media for effective science learning
- ❷ Transition to STEM education
- ❸ Science communication for all
- ❹ Science learning for sustainable development
- ❺ Innovations in science communication

### WHO CAN PARTICIPATE?

- School teachers of upper primary, secondary and higher secondary levels.
- Educators of vocational/open schools, teacher educators, DIET faculty, science educators/communicators, B.Ed/M.Ed students, researchers and scientists are also eligible.

♦ Paper submission deadline: **6 October 2018** ♦

Please visit the website for Guidelines, Registration Form and more details. For those who wish to get further guidance on the theme, subtheme and paper writing, orientation workshops are also being planned in different regions. Details will be announced on the website.

Submit your paper along with the Registration Form, so as to reach on or before 6 Oct 2018 to:

NTSC Secretariat  
Vikram A Sarabhai Community Science Centre  
Opp. Gujarat University, Navrangpura  
Ahmedabad - 380 009  
Phone: 079 26302085, 26302914  
OR email it to: [ntscindia@gmail.com](mailto:ntscindia@gmail.com)

### For more information

Helpline: 94284 05407

Website: [www.ntscindia.in](http://www.ntscindia.in)

Catalysed and supported by



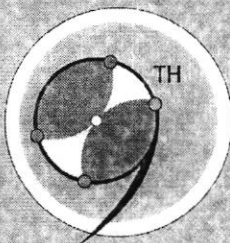
Department of Science & Technology  
Government of India



Implemented by



VIKRAM A SARABHAI  
COMMUNITY SCIENCE CENTRE



# National Teachers Science Congress

14-16 Dec 2018 • AHMEDABAD

## CALL FOR PAPERS

### Guidelines

**INTRODUCTION:** The National Teachers Science Congress (NTSC) is an initiative of the National Council for Science & Technology Communication (NCSTC), Dept. of Science and Technology (DST), Govt. of India. The NTSC started in year 2003 with aim to provide a platform to the Science and Mathematics teachers to communicate their ideas, share new experiments in teaching methodology and Science education and enhance their level of scientific awareness.

The 9<sup>th</sup> National Teachers Science Congress (NTSC) is being hosted by Vikram A Sarabhai Community Science Centre (VASCSC) during 14-16 December 2018 at Ahmedabad, Gujarat.

**OBJECTIVES:** The NTSC is organized with the following objectives:

- To promote research and development at school level
- To share effective science and mathematics pedagogy
- To provide teachers with opportunity to present their innovative approaches in science teaching learning process
- To make teachers aware about best practices of other teachers; and apply it in their regular teaching
- To interact with educationists/scientists and learn about new trends and practices in science education

Papers are invited from teachers/educators who wish to present innovative and original ideas in science education and communication, based on the subthemes under the focal theme of the event.

[www.ntscindia.in](http://www.ntscindia.in)



## **FOCAL THEME**

### **Design Literacy for Effective Science Communication by Educators**

## **SUB THEMES**

- ① **New and emerging media for effective science learning**
- ② **Transition to STEM education**
- ③ **Science communication for all**
- ④ **Science learning for sustainable development**
- ⑤ **Innovations in science communication**

## **ABOUT THE THEME**

It is seen that students often turn to rote learning. This is due to several factors, including lack of practical and hands-on, minds-on exposure as well as lacunae in the way science is communicated. The success of science education depends largely on the effective communication right from school level. Hence, teachers need to imbibe and use innovative methods and practices for effective science communication.

One innovative framework to enhance the teaching learning process is 'design thinking', a rich and dynamic process that emphasizes inquiry, innovation, ideation, building, and problem solving. Design thinking process comprises distinct phases like Empathy, Define, Ideate, Prototype, Test and Implement. Scientific methodologies and principles can be explained through design with ease as the communication is done in collaboration with and from the perspective of the learner.

The Design Literacy concept is informed by design thinking. It applies the protocols of design thinking to arrive at an idea, product or process. Efficacy of science communication can be improved by design in providing an in-depth and holistic understanding of scientific concepts and their real-world applications. It will go a long way in nurturing spirit of inquiry, fostering creativity and developing culture of innovation among students, equipping them with skills and competence to create equitable and sustainable future.

With this background, the focal theme for 9<sup>th</sup> NTSC is selected as 'Design Literacy for Effective Science Communication by Educators'.

#### **WHO CAN PARTICIPATE?**

- Teachers of upper primary, secondary and higher secondary levels.
- Educators of vocational/open schools, teacher educators, DIET faculty, science educators/communicators, B.Ed/M.Ed students, researchers and scientists are also eligible.

#### **PAPER SUBMISSION GUIDELINES**

- Each participant can submit one paper only, which should be their original work based on any one of the given subthemes.
- If the paper is selected, only the author will be invited for the presentation. The co-author will not be allowed under any circumstances.
- The full paper should be of max. 3000 words, along with an abstract of 200 words and 4-5 key words.
- The paper should be typed in MS Word, on standard A4 size paper.
- The body of manuscript must be prepared on a 1.15 spacing & single column, 12-pt Times New Roman font, with page nos. at the bottom-centre of every page.
- All section headings should be in 14-pt Times New Roman font and sub-section headings should be in 12-pt Times New Roman font. These must be bold-faced, aligned left & fully capitalized. Leave a blank line before each heading.
- Figures & Tables: These must be simple, centered & numbered, with the titles of figures/tables above the figure/table.
- The following components should be included in the paper:

a. Title/Cover Page	f. Discussion/Analysis
b. Abstract, Keywords	g. Conclusion/Comments
c. Introduction	h. References
d. Methodology	i. Acknowledgement
e. Results/Findings	j. Annexure
- The language used for papers and presentations can be either English or Hindi.
- The entries should be accompanied by the Registration Form (also available on website).
- The shortlisted participants will be invited for either oral or poster presentation of their papers during the 9<sup>th</sup> NTSC.
- Please visit the website for Poster, Registration Form and more details.



### Regional Orientation Workshops

For those who wish to get further guidance on the theme, subtheme and paper writing; orientation workshops are also being planned in different regions. These workshops are intended to help the teachers to fine-tune their paper submission process. Details will be announced on the website.

However, participation in regional workshop is not mandatory for submitting a paper and has no bearing on the selection process for the NTSC. Teachers can submit their paper even without participation in the regional workshops.

**Paper submission deadline: 6 October 2018**

Submit your paper along with the Registration Form,  
so as to reach latest by 6 Oct 2018 to:

NTSC Secretariat  
Vikram A Sarabhai Community Science Centre  
Opp. Gujarat University, Navrangpura  
Ahmedabad - 380 009  
Phone: 079 26302085, 26302914

OR email it to: [ntscindia@gmail.com](mailto:ntscindia@gmail.com)

For more information  
Helpline: 94284 05407  
Website: [www.ntscindia.in](http://www.ntscindia.in)

Catalyzed and supported by



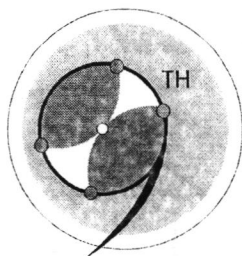
Department of Science & Technology  
Government of India



Implemented by



VIKRAM A SARABHAI  
COMMUNITY SCIENCE CENTRE



# National Teachers Science Congress

14-16 Dec 2018 • AHMEDABAD

## Registration Form

To be filled and submitted by the applicant

Paste passport size  
photograph here

Author's Name: .....

Designation: .....

School/Institution (Name & Address): .....

Pin: 

--	--	--	--	--	--	--	--	--	--

Phone: ..... Email: ..... Website: .....

Address (Residence): ..... Pin: 

--	--	--	--	--	--	--	--	--	--

Phone: ..... Mobile: 

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

 Email: .....

Gender: ..... Age: .....

Educational Qualification: .....

Teaching subjects: ..... Std: .....

Work Experience: ..... years Medium of Instruction: .....

Details of Co-author (if any): .....

---

Title of the Paper: .....

Focal Theme: **Design Literacy for Effective Science Communication by Educators**

Subtheme selected (Tick ✓ any one )

1. New and emerging media for effective science learning ☐
2. Transition to STEM education ☐
3. Science communication for all ☐
4. Science learning for sustainable development ☐
5. Innovations in science communication ☐

### Declaration

- I hereby declare that the information furnished by me is true and complete to the best of my knowledge.
- The enclosed paper is entirely my original work and involves no plagiarism. All sources (print, internet or other) have been properly acknowledged and referenced.
- I understand that if plagiarism is found in my paper, it will be disqualified.
- I understand that the 9<sup>th</sup> NTSC organizers have the absolute right to selection or rejection of my paper without assigning any reason thereof.
- I understand that if my paper is selected, only the author will be invited for the presentation. The co-author will not be allowed under any circumstances.

Date: .....

Place: .....

Signature of Author

Signature of Co-author

### To be filled by the Principal/Head of Institution

This is to certify that ..... is working at our school/institution as ..... and is herewith submitting paper for the 9<sup>th</sup> NTSC. We have no objection in their participation, if their paper is selected for the event.

Name: .....

Designation: .....

School/Institution: .....

Date & Place: .....

Signature & Seal

Submit your paper along with this Registration Form, so as to reach latest by 6 Oct 2018 to:

NTSC Secretariat  
Vikram A Sarabhai Community Science Centre  
Opp. Gujarat University, Navrangpura  
Ahmedabad - 380 009  
Phone: 079 26302085, 26302914

OR email it to: [ntscindia@gmail.com](mailto:ntscindia@gmail.com)

For more information

Helpline: 94284 05407

Website: [www.ntscindia.in](http://www.ntscindia.in)

Catalyzed and supported by



Department of Science & Technology  
Government of India



Implemented by



VIKRAM A SARABHAI  
COMMUNITY SCIENCE CENTRE