

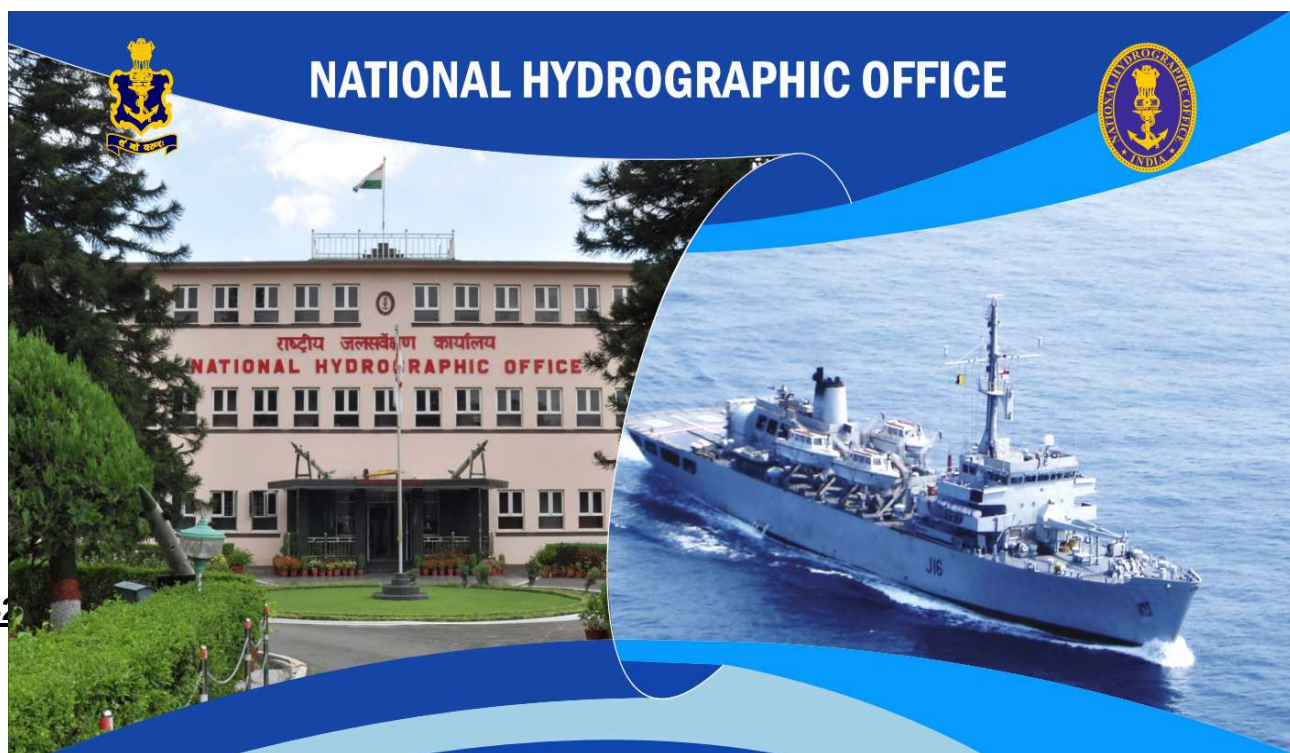
Final Circular

42nd INCA INTERNATIONAL CONGRESS

ON

DIGITAL CARTOGRAPHY TO HARNESS BLUE ECONOMY

09 – 11 NOV 2022



ORGANISED BY

NATIONAL HYDROGRAPHIC OFFICE
107-A, RAJPUR ROAD,
POST BOX NO 75
DEHRADUN -248001



LOCAL ORGANISING COMMITTEE

CHIEF PATRON: Vice Admiral Adhir Arora, NM

PATRON : Rear Admiral LS Pathania

CHAIRMAN: Commodore Peush Pawsey

ORGANISING SECRETARY: Captain Kuldeep Singh

TREASURER: Dr. R.A.Prasad

EDITOR: Dr. B.K.Ramprasad

From the INCA President

Vice Admiral Adhir Arora, NM

*Chief Hydrographer to the Govt. of India
& President*

Indian National Cartographic Association (INCA) 2021-22



The announcement of the 42nd INCA International Congress which was issued in Jun 22 has generated high enthusiasm among prospective delegates. The overwhelming request for fresh membership of the INCA are indicative that delegates are looking forward to visit NHO, Dehradun which is one of the best scenic places in India and the city of Hydrographic Chart Production. Enthusiasm to attend the **42nd INCA International Congress** is equally high among members and non-members from the Institutions and Industries in India and abroad.

The Overwhelming response can also be attributed to the fact that this Congress will focus on “**Digital Cartography to Harness Blue Economy**” which is a very relevant in the contemporary times for such professional event.

INCA is the prime National body for Cartography and its mission is to promote the discipline and profession of cartography in India. Considering the futuristic challenges, we cannot afford to rest on INCA laurels regardless of how impressive its achievements had been in past. The concept of mapping/charting must be applied to a whole new range of activities coming up, which are well beyond those of traditional cartography. Digital cartography has spread its wings at a very rapid pace and has found favour with many applications. The cartographic organization and vendors are moving in the right direction as will be unveiled in the deliberations during the **42nd INCA International Congress**.

The flow of papers/abstracts, inquiries for advertisements in the Souvenir, requests for exhibition stalls from various vendors, private agencies and Govt Departments for sponsorship of the events of the congress is indeed motivation and provides an impetus to the efforts of the local organising committee and its sub-committees.

Your valuable attendance and knowledgeable presentations will certainly go a long way towards the success of the **42nd INCA International Congress**. The Executive Committee Members, my colleagues at NHO and I would be happy to welcome you with warm hospitality and seek your co-operation towards professionally stimulating papers and generous sponsorship.

NATIONAL ADVISORY COMMITTEE

Shri Srivari Chandrasekhar Secretary, Mo S&T	Sh. PS Acharya CEO-NSDI	Dr. Ajay Kumar, Sc 'G' Director, IRDE
Shri Manoj Joshi Secretary M/o Housing & Urban Affairs	Shri Agendra Kumar Advisor & President, ESRI	Prof. Sunil Kumar Singh Director, NIO
Shri M. Ravichandran Secretary, M/o Earth Sciences	Dr. M P Narayana President, CSDMS	MirzaJaved Beg Director NCPOR
Shri Ajay Tirkey Secretary, M/o Rural Development	Dr. Virendra M. Tiwari Director, NGRI	Shri Mangal Lal Chand, Outstanding Scientist & Scientist 'H' Director, DEAL
Ms. Leena Nandan Secretary, M/o Environment, Forest & Climate Change	Dr. G A Ramadass Director, NIOT	Shri Rajesh Alla CMD IIC Technologies
Prof. Mamidala Jagadesh Kumar Chairman, UGC	Dr. Prakash Chauhan Director, NRSA	Dr. V K Dadwal Senior Ex- President, INCA
Shri S. Somanath Chairman, ISRO	Dr. S Raju Director General, GSI	Prof. Dr. VC Jha Former Vice- Chancellor TMBU Former Director NATMO
Shri Rajendra Singh Chairman NDMA	Dr. Srinivasa Kumar Tummala Director, INCOIS	Dr. Satya Prakash Yadav Director Wild Life Institute of India
Dr. P.P. Dhyani Chancellor UTU	Dr. Malini V. Shankar Director General Shipping	Dr. Tapti Banerjee Ex-President, INCA
Dr. P Nag Vice Chancellor, MGKV	Shri N. Muruganandam Director General, DGLL	Maj Gen (Retd) M.K. Tayal Ex-President, INCA
Prof. Neelima Gupta Vice Chancellor Dr. H S GourUniv	Capt. K.P. Jayakumar Nautical Adviser-Cum- Addl.DG (Nautical)	Prof. J L Jain Ex-President, INCA
Prof. Sudhir K Jain Vice Chancellor Banaras Hindu Univ	Prof Surya Kant Ex- President, INCA	Prof. Krishna Mohan Ex-President, INCA

42nd INCA International Congress

Final Circular

1. The National Hydrographic Office, Dehradun, India, has the honour of inviting all the professionals interested in the field of Cartography/GIS and allied subjects as well as various disciplines of their application viz. Geography, Geology, Geophysics, Oceanography, Geo- informatics, Artificial intelligence, Hydro-meteorology, Marine Geomorphology, Coastal Resource Management and Environmental Planning etc. to participate in the forthcoming 42nd International Congress of Indian National Cartographic Association (INCA), being held at Dehradun, Uttarakhand, during **09-11 November 2022**.

2. Indian National Cartographic Association (INCA) is an inter- disciplinary institution originally between Geographers and Cartographers which is now shared by a host of premier public and private bodies. Since its inception, Cartography in India has seen many changes. Re-christened since then as GIS or Geoinformatics, it is today a multifaceted and highly composite broad subject, rolling several disciplines and multi-dimensional association, which was established in 1979 at Hyderabad as its headquarters, with the following aims: -

- (a) To foster cartographic research in the country.
- (b) To co-operate with professional organisations of cognate disciplines and to promote interaction within an inter-disciplinary frame.
- (c) To co-operate with International organisations with similar objectives.
- (d) To foster co-operation between government and quasi government organisations, research institutions engaged in cartographic activities and their application.
- (e) To hold an annual cartographic congress at the national or international level.
- (f) To take such measures as may help secure cartography its legitimate place in national life and enhance a sense of national responsibility and professional efficacy among all the professionals and academic people engaged in cartographic activities in its broad sense.

3. **The Host.** The National Hydrographic Office (NHO) is a specialised branch of the Indian Navy functions under the Chief Hydrographer to the Government of India. The Organisation is a direct descendant of Marine Survey of India founded in 1874 by the British with its office at Kolkata. This Office at its present location in Dehradun was established in 1954 which has been renamed as the “National Hydrographic Office” (NHO) in 1997. NHO is the national authority for publication of navigational charts and publications essentially required for safe navigation of ships. The NHO provides reliable and updated information for safety of navigation at sea as per SOLAS regulations and for the exploration and exploitation of natural resources/projects of economic importance at sea through detailed surveys and research programmes. It interacts with various agencies at National/International level in the field of Hydrography and Oceanography including Coastal Zone Management, environmental protection, on norms laid down by International Hydrographic Organization (IHO). The field surveys are executed by seven Ocean going surveying ships fully fitted with state-of-the-art equipment. Data collected by the ships are thoroughly examined by the experienced Hydrographers/Cartographers at the Dehradun office and published as navigational paper and electronic charts and allied publications meeting the specified IHO standards for use by the sea going community.

4. **Focal Theme.** The theme for 42nd INCA International Congress is:

“Digital Cartography to Harness Blue Economy”

5. **Sub-Theme.** The deliberation of the congress will be divided into the following sub-themes:

- (a) Trending Cartography – Past, Present and Future
- (b) Modern Precision Surveying & Mapping Tool
- (c) Geospatial Solution for Sustainable Water Resource Management
- (d) Hydrographic Surveys and Mapping for Coastal Zone Management
- (e) GIS Application for Climate Change and Environmental Studies

- (f) Mapping Solutions for Risk Assessment, Mitigation Measures and Disaster Management
- (g) Application of Artificial Intelligence tools for Urban Planning and Resource Management

6. **Technical Papers.** Technical research papers/case studies have been invited from professionals/ scientists, academicians and research students in the field of Cartography, Geography, Marine Geology & Geomorphology, Hydrology, Marine Geophysics, Oceanography, Environmental Science, Meteorology and various marine survey departments. **All Authors, who have submitted papers, are requested to update their complete contact address with telephone number, Fax and E-mail on INCA website** and are requested to go through the technical session schedule for the congress.

7. **Poster Presentation Guidelines.**

The Poster Size should be limited to **A0 paper size**. Boards will be provided for posters at appropriate places. The Posters should be visually attractive and eye catching. Maps and figures must be in finished form and readable preferably in font 20 or higher. Posters must be ready to be placed at the beginning of the Congress. Poster presentations are planned on 09 Nov 22 in the Exhibition Area. The presenters are expected to be ready with the posters by 1300 Hrs on 09 Nov 22.

8. **Endowment Lectures.**

During the Congress, two prestigious Endowment lectures namely **Todar Mal** and **S.P.Chaterjee Memorial Lectures** will be delivered by eminent professionals in mapping field.

9. **Contact Persons.**

Captain (IN)Kuldeep Singh	+91-135-2746290
Mr Rajesh Kumar Khatri	+91-135-2746291

10. **Registration.** Interested participants are requested to register well in advance online along with the registration fees and send the details to the **Organising Secretary**, by **07 Nov 2022 through 42nd INCA website** www.42inca.org or in email info@42inca.org.

11. **Registration Fee.**

Participant	Indian Delegates	Foreign Delegates	Indian Delegates	Foreign Delegates
	<i>Registration by 30 Sep 22</i>		<i>Registration on or after 30 Sep 22</i>	
Life Member	Rs.2500+18% GST=Rs.2950	US\$ 125	Rs.3000 +18% GST= Rs.3540	US\$ 175
Other Delegates	Rs.3000+18% GST=Rs.3540	US\$ 125	Rs.3500+18% GST= Rs.4130	US\$ 175
*Accompanying Person	Rs.2000+18% GST=Rs.2360	US\$ 100	Rs.2500+18% GST= Rs.2950	US\$ 100
Research Fellow/ Students	Rs.1500+18% GST=Rs.1770	US\$ 100	Rs.2000+18% GST= Rs.2360	US\$ 100

**No Kits for accompanying Members.*

Registration fee also includes conference kit and catering on the conference days. Student delegates those who are presenting papers as an author, could avail above discounted registration rates. Accompanying registrants and student authors will be entitled to participate in all technical and keynote sessions and catering on conference days. However, they will be required to submit authorisation from the concerned Department of University /College/Organisation stating their bonafide status and that they are not employed.

12. **Exhibition.** An exhibition of maps, charts, globes, models and cartographic, reprographic, surveying, remote sensing related latest equipment will be organised during the congress at the venue, to encourage interested companies to show case their products and services. This will be of immense benefit to the cartographic community.

13. **General Information.**

(a) **About Dehradun.** Dehradun, the capital of the Uttarakhand is visited by a large number of tourists every year, many of them en-route to Mussoorie. Nestled in the gorgeous mountain ranges of the Himalayas, the climate of the city is temperate even during summers. Dehradun is one of the fast-emerging modern cities in Northern India. The city boasts of many National Institutes like the Forest Research Institute (FRI), Indian Institute of Remote Sensing (IIRS), Rashtriya Indian Military College (RIMC), and the Indian Military Academy (IMA) besides a host of prestigious public schools. Dehradun has been one of the best known educational centres in Northern India. The city is well connected by road, rail and air. A few of the prominent locales around Dehradun are:

(b) **Mussoorie.** The Queen of Hills, is located about 28 Kms from Dehradun and amongst the most popular hill stations in India. It's a leisure traveller's and honeymooner's paradise that captivates the onlookers. A perfect summer resort and a major educational and cultural centre rolled into one hub. Places to see in Mussoorie include the Gun Hill, Mall Road, Mussoorie Lake, Landour, Camel's Back Road, Laltibba, Sir George Everest House, Tibetan Temple, Municipal Gardens/Company Bagh and Kempty Fall.

(c) **Rishikesh.** The pilgrimage town of **Rishikesh** is about 40 Kms from Dehradun. Rishikesh is also considered as the Gateway to the Himalayas. The Char Dham Yatra (Four Shrines sacred journey) generally begins from Rishikesh.

(d) **Haridwar.** About 50 Kms from Dehradun is one of the most ancient pilgrimage centres in India that has been held in reverence from time immemorial. Haridwar is literally the Gateway to the Lord (Hari-Dwar). As the point of entry to Dev Bhoomi and Char Dham (the four main shrines situated in the upper reach of

the Himalayas, Badrinath, Kedarnath, Gangotri and Yamunotri in Uttarakhand) it acquires its name Haridwar.

(e) **How to Reach.** Jolly Grant Airport in Dehradun is a domestic airport located at about 20 km away from city centre. Taxi cabs are available from the airport to city. The airport operates daily flights to Delhi. Nearest International airport is Delhi, which is about 235 km away. Dehradun is a major railway station which is connected to all cities in the country. The major cities like Delhi, Kolkata, Varanasi, Chennai, Trivandrum, Mumbai, Ujjain, Indore, are connected by express trains and superfast trains. All nearby cities are connected to Dehradun by State owned Uttarakhand transport buses. There are overnight deluxe A/C bus services of Uttarakhand Tourism from New Delhi to Dehradun. A distance of 235 km from Delhi to Dehradun costs about Rs.600 by deluxe bus. The venue for the conference is the NHO which is about 5 kms from the Dehradun railway station and 30 kms from Jolly Grant airport.

(f) **Weather & Clothing.** Throughout the month of November, daytime temperatures will generally reach a high of around 26°C. At night the average minimum temperature drops down to around 17°C. In recent times the highest recorded temperature in November has been 33°C, with the lowest recorded temperature 9°C. Normal cotton / light woolen clothes are suggested for the day and woolen clothes for the evenings.

(g) **Help Desk.** A help desk will be setup at NHO for providing necessary assistance to all delegates w.r.t accommodation and transport. Delegates are requested to approach the help desk for further assistance on Mob: 9411340255 (Mr Sunil Dutt). The accommodation is subject to availability, if otherwise already not booked by them well in time.

(g) **Accommodation.** The Period of the Conference i.e 09-11 Nov 2022 is good period as regards to weather and constitute off tourist season, but nothing

can be forecasted about other scheduled events during the period of the conference. Therefore it is advised that hotels may be pre-booked. Delegates who wish to book their accommodation may contact directly with hotels. The table below indicates the approximate tariff of various categories of accommodation available in nearby area. The details of the Hotels compiled from online sources and the contact numbers are as given below-

<u>Ser</u>	<u>Name of Hotel</u>	<u>Contact No</u>	<u>Distance</u>	<u>Room Type</u>	<u>Price</u>
(a)	Space Hotel, Jakhan	9761006669 9520897972	4 KM	AC Single / Double	3140 Rs / WEBSITE
(b)	Ajanta Continental, Rajpur Road	9322800100	1 KM	AC Single / Double	2822 Rs / WEBSITE
(c)	The Daffoldils, Rajpur Road,Hathibadkala	073-0211174	600 M	AC Single / Double	2303 Rs / WEBSITE BASE PRICE
(d)	Hotel Madhuvan, Rajpur Road	0135-2749994	1 KM	AC Single / Double	3400 Rs
(e)	Hotel Skying, Near Scholar Homes	9873242322	2 KM	AC Single / Double	2383 Rs / MMT
(f)	Comfort Inn, Sahastradhara Road	8864998999	4 KM	AC Single / Double	5000 Rs / Yatra.Com
(g)	Emrald Grand, Sahastradhara Road	0135-2983333	2.9 KM	AC Single / Double	5100 Rs / Booking.co m
(h)	Hotel Lamarg, EC Road	07060002333	2.7 KM	AC Single / Double	4051 Rs
(j)	Hotel Heritage	09760078907	3 KM	AC Single / Double	2000 Rs
(k)	Hotel Pacific	0135-2712377	4 KM	AC Single / Double	4000 Rs
(l)	Hotel Inderlok	0135-2658113 0135-2652744	2.1 KM	AC Single / Double	3273 Rs

14. **MISCELLANEOUS**

The Social evenings on 09 and 10 Nov 22 befitting the occasion are being planned which would include performance by the Navy Band and cultural show by reputed performers.

15. **TENTATIVE PROGRAM**

<u>08 Nov 22</u>
10:00 AM to 18:00 PM – Reception and Registration of delegates
17:00 PM to 19:00 PM – 178 th EC Meeting
19:00 PM to 21:30 PM – Dinner for EC members
<u>09 Nov 22</u>
09:00 AM to 11:00 AM – Registration of Delegates at NHO
11:30 AM to 12:00 PM – Inaugural Tea
12:00 PM to 12:15 PM – Seating of Delegates for Inaugural Session
12:15 PM to 13:30 PM – Inaugural Session
13:30 PM to 13:45 PM – Inauguration of Exhibition
14:00 PM to 14:40 PM – Endowment Lectures
14:45 PM to 15:30 PM – Working Lunch
15:30 PM to 16:30 PM – Industry Presentations
19:00 PM to 21:30 PM – Social Evening and Dinner
<u>10 Nov 22</u>
09:00 AM to 10:30 AM – Technical Sessions
10:30 AM to 11:00 AM – Tea Break
11:00 AM to 13:00 PM – Technical Sessions
13:00 PM to 14:00 PM – Working Lunch
14:00 PM to 15:30 PM – Technical Sessions
15:30 PM to 16:00 PM – Tea Break
16:00 PM to 17:00 PM – Technical Sessions
19:00 PM to 21:30 PM – Social Evening and Dinner
<u>11 Nov 22</u>

09:00 AM to 10:30 AM – Technical Sessions
10:30 AM to 11:00 AM – Tea Break
11:00 AM to 13:00 PM –Valedictory Function
13:00 PM to 14:00 PM – Working Lunch
14:00 PM to 16:00 PM – INCA General Body Meeting

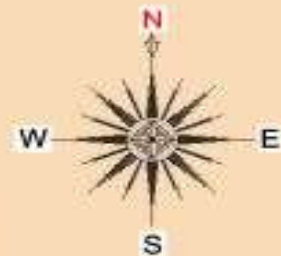
16. Detailed Technical Session Program is attached as Annexure-1 to this Circular

CONTACT PERSONS.

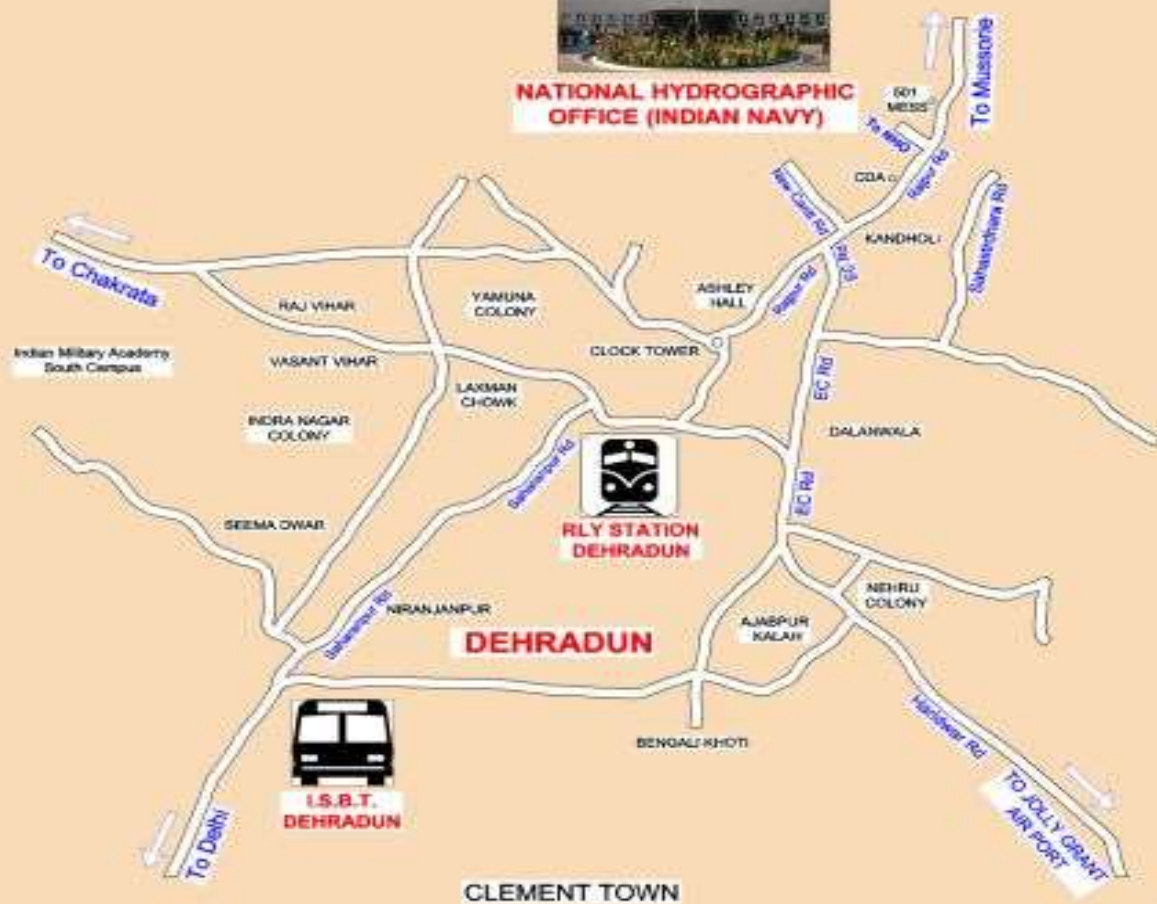
Congress Secretariat:

Capt Kuldeep Singh,
Organising Secretary,
42ndINCA International Congress,
National Hydrographic Office
107 A, Rajpur Road, Dehradun-248 001
Tele: +91 135 2746290-95, Fax: +91 135 2748373, Email: info@42inca.org
Website: www.42inca.org

DEHRADUN ROUTE MAP



**NATIONAL HYDROGRAPHIC
OFFICE (INDIAN NAVY)**



NOT TO SCALE

EXECUTIVE COMMITTEE

President Vice Admiral Adhir Arora, NM	Members
	Brigadier S SridharaRao
	Commodore Peush Pawsey
	Mr. Sunanda Trivedi
Co-President Surveyor General of India	Dr. VanditaSrivasatva
	Dr. R A Prasad
	Dr. B K Ramprasad
	Dr. SwapnaSaha
Past President Prof Krishna Mohan	Ms. AnjanaBandyopadhya
	Sh. O P Savra (Retd.)
	Dr. Bimal Kumar Kar
	Prof. PremlataSinghi
Senior Vice-President Dr. MuraliKrishnan S – NRSC	Dr. ShuklaHazra
	Dr. SuchetaMukhrejee
Vice-President Sh. SajiKrishnan K – NATMO	
Vice-President Sh. S V Singh – SOI	
Secretary General Sh. Pankaj Kumar	
Secretary - I Dr. K Pramod Kumar	
Secretary - II Rajesh Kumar Khatri	
Treasurer Sh. P.Krishnaiah	
Chairman Editorial Board Prof. (Dr.) V.C.Jha	