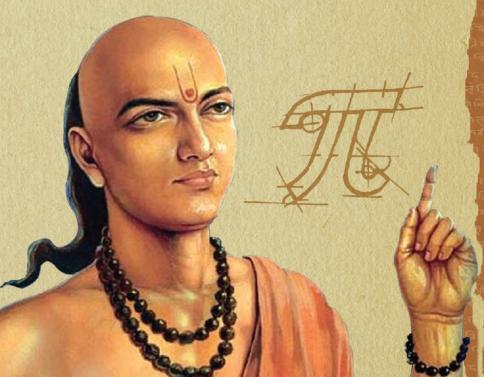


The 27 nakshatras, with the earth in the centre (Courtesy: M.S. Sriram)

Aryabhata I (born 476 CE), ushered in this era with his Aryabhatiya, which dealt concisely but systematically with developments in mathematics and astronomy. Among other things, it discussed units of time and features of the celestial sphere, described the earth as a rotating sphere hanging in space, and produced a table of the planets' mean positions.

~ (Knowledge Traditions and Practices of India, Module I, Astronomy in India, CBSE, pp.12, 17)







bauddhika ātmanirbharatā

with special reference to Science and Technology

*FACULTY DEVELOPMENT PROGRAMME, 2022

about

India's Knowledge Traditions:

भारत की ज्ञान - परम्पराएँ (bhārata kī jñāna paramparāyen)

Recovery, Positioning and Mainstreaming

November 22 - December 9 09:00 - 17:30 Hours (IST)



an intiative by

Centre of Excellence for Indian Knowledge Systems (CoE-IKS), Indian Institute of Technology Kharagpur (IIT KGP)

in collaboration with Centre for Professional Development in Higher Education (CPDHE) UGC-HRDC, University of Delhi

knowledge partners

Indian Knowledge System Division of the Ministry of Education @ The All India Council for Technical Education (IKS Division of MoE @ AICTE) **Brhat Culture Creative LLP**













FDP IKT: RPM 2022 an extension of FDP IKS 2020 & 2021 is third in the series. Staged as an annual event, the FDP IKS baton is held

Rasānubhūti

18:30 - 21.00 hours | Kalidas Auditorium





Vidushi Kaushiki Chakraborty Vocal)





(Sarangi)



Sh. Ojas Adhiya: Sh. Murad Ali Khan: Sh. Tanmay Deochakke



Smt. Parvathy Baul (Sādhika, Performer, **Teacher of Baul Tradition**







Ustad Amjad Ali Khan (Sarod)

pṛṣṭhabhūmi

There is a popular misconception that India's knowledge is mostly restricted to disciplines that involve speculation and imagination. Nothing can be farther from the truth. India's knowledge as contained in what is perhaps the world's largest body of intellectual texts, is primarily and essentially empirical and not restricted to 'theories in the text' but closely interwoven with the lived lives of people. As such from the beginning, thought about both what is observable and what can only be experienced has produced in the process of cogitation a large number of philosophical and imagination-based *vidyās* and also hard sciences dealing with the material reality, the earth and the cosmos.

It is in order to dispel this widely shared *bhrānti* about India's knowledge being divorced from the observational sciences, the **CoE-IKS**, **Indian Institute of Technology Kharagpur** brings the 'Faculty Development Programme 2022 about India's Knowledge Traditions – *bhārata kī jñāna paramparāyen:* Recovery, Positioning and Mainstreaming (FDP_IKT:RPM 2022)' with reference to 'Science and Technology' - which very often has been the pioneering science that generated foundational concepts that underpin and inform what is called modern science.

FDP_IKT:RPM 2022 hopefully will also communicate and explain as to why and is India fast becoming ātmanirbhara in civil, urban, peace and war technologies. We believe that this endeavour will support and strengthen the Government's resolve to create ātmanirbhara bhārata. The programme also is intended to bridge the gap between the vision of an IKS centered education espoused by National Education Policy 2020 (NEP 2020) and the levels of awareness, preparation and competency required to accomplish the same.

The NEP 2020 envisions an educational system patterned on the lines of cultural and artistic heritage - "scientific temper and evidence-based thinking to a sense of aesthetics and arts". The *chāndogya upanisad* (8.11.4) speaks of 'sa hā'parāṇi dvātrimśāt varṣāṇyuvāsa' meaning Lord Indra's surrender to his *guru Prajāpati* for another thirty-two years for gaining supreme knowledge. Immersed in the above spirit of this *bhārata kī jñāna paramparāyen*, the FDP also presents 'Rasānubhūti,' - with the legends Smt. Kaushiki Chakraborty (Hindustani vocalist) and Ustad Amjad Ali Khan (Sarod Maestro), who exhibits a continuing lifelong journey of such a śikṣā paddhati grahana as Lord Indra.

Third in the sequel, this residential FDP_IKT: RPM 2022 is in continuation and builds on the foundations laid by FDP_IKS 2020 and FDP_IKS: STCP 2021, organized by the Dept. of Contemplative and Behavioural Sciences at Sri Sri University (5 - 19 Nov, 2020); the Rashtram School of Public Leadership, Rishihood University (16 Nov – 7 Dec, 2021) & is being staged to be an annual event – the baton of which can be held each year by different Higher Educational Institutions (HEIs) and stakeholders to enable the institutionalization of IKS based education.



vişaya

bhārata kī jñāna paramparāyen

khagola vijñāna (Astronomy)

vāstukalā (Architecture)

āyurveda

kṛṣi vijñāna (Agriculture)

paryāvaraņa vijñāna (Environmental Sciences)

ganita (Mathematics)

chandaḥśāstra (Prosody)

rasa-śāstra evam dhātu vijñāna (Chemistry & Metallurgy)

rājya, samāja va śāsana tantra (State, Society and Polity)

pramāṇa vijñāna (Cognitive Sciences)

bhāṣā va vyākaraṇa (Language and Grammar)

ānvīkṣikī (Logic and Disputation)

niyuddha kalā (Martial Arts)

yuddha vidyā (Military Sciences)

Bharata's nāṭyaśāstra (Science of Drama, Dance and Music)

bhāratīya jñāna praṇālī - saṃbhāvanā evam abhigraha

(IKS and Big Possibilities & Challenges: Systemic, Methodological, Pedagogical, Competencies)

Reflections, Opportunities & Way Forward

śikṣaka.



Ar. Aabhas Maldahiyar Author



Dr. Aditya Kolachana Indian Institute of Technology Madras



Ms. Ami Ganatra
Brhat Culture Creative LLP



Prof. Amitabha Ghosh Emeritus Scientist of Indian National Science Academy



Dr. Anil P Joshi Himalayan Environmental Studies and Conservation Organisation



Dr. Anuradha Choudry
IKS Division of MoE @ AICTE



Dr. Ashwinkumar Patel Sri Sri Tattva Panchkarma



Prof. B Mahadevan
Indian Institute of Management Bangalore



Sh. Bandeep Singh India Today



Prof. Bhagawati Prakash SharmaPacific Group of Universities



Prof. Bharat Gupt
Indira Gandhi National Centre for the Arts



Prof. B N Jagatap Indian Institute of Technology Bombay



Dr. D K Hari & Dr. D K Hema Hari Bharath Gyan



Prof. Darshan ShankarThe University of Trans-Disciplinary
Health Sciences and Technology



Dr. Dipesh Vinod Katira
Indian Institute of Technology Kharagpur



Pravrajika Divyanandaprana Sri Sarada Math



Prof. Ganti S Murthy

IKS Division of MoE @ AICTE



Prof. Gautam R Desiraju
Indian Institute of Science



Prof. Geeta Singh CPDHE (UGC-HRDC), Univ. of Delhi



Prof. Girishwar MisraFormerly - Univ. of Delhi



Dr. H R Nagendra Swami Vivekananda Yoga Anusandhana Samsthana



Sh. Hari Kiran INDICA



Brigadier (Dr.) Prof. J S Rajpurohit Formerly - Indian Army



Sh. J Sai Deepak Author and Lawyer at Supreme Court



Dr. Jayashree A Gajjam Indian Institute of Technology Kharagpur



Prof. Joy SenIndian Institute of Technology Kharagpur



Prof. K RamasubramanianIndian Institute of Technology Bombay



Prof. Kapil Kapoor Formerly - Indian Institute of Advanced Study (IIAS)



Dr. Kundan Singh Hindu University of America, USA



Prof. M S SriramProf. K V Sarma Research Foundation



Sh. Madhusudhan Chauhan Jiva Ayurveda



Dr. Mahesh KIndian Institute of Technology Kharagpur



Dr. Mansee Bal Bhargava Entrepreneur



Swami Medhananda Vedanta Society of Southern California



Sh. Mukul Kanitkar Bharatiya Shikshan Mandal



Prof. N Ganesh Rao ACT Yoga



Dr. Nagaraj Paturi INDICA



Prof. Omkar Nath Mohanty RSB Group



Lt. Gen. P G Kamath
Commandant of Army War College,
Mhow, India



Vaidya P Rammanohar Amrita Vishwa Vidyapeetham

śiksaka



Sri Sri institute of Agricultural Sciences and Technology



Prof. Pratim Kumar Chattaraj Indian Institute of Technology Kharagpur



Sh. Raghava Krishna Brhat Culture Creative LLP



Dr. Raj Vedam Hindu University of America



Prof. Rani Sadasiva Murty National Sanskrit University



Pt. Sanjay Rath jyotiş guru



Smt. Sashikala Ananth Ritambhara Ashram



Dr. Satish Y Deodhar Indian Institute of Management Ahmedabad



Prof. Shankha Pratim Bhattacharya Indian Institute of Technology Kharagpur



Agasthyam Kalaripayattu

Prof. Dr. ShashiPrabha Kumar Indian Institute of Advanced Study



Prof. Shekhar P Seshadri Formerly - NIMHANS



Prof. Shrinivasa Varakhedi



Central Sanskrit University



Acharya Shri Shrivatsa Goswami Recipient of the Sangeet Natak Akademi Lifetime Award for Service to Indian Culture from the President of India



Dr. Sonal Mansingh Centre for Indian Classical Dance



Sh. Srinivas Jammalamadaka Kavikulaguru Kalidas Sanskrit University



Sh. Sriram Balasubramanian **Economist and Author**



Prof. Sushant Kumar Mishra Jawaharlal Nehru University



Prof. Somesh Kumar Indian Institute of Technology Kharagpur



Dr. V Ramanathan Indian Institute of Technology (BHU) Varanasi



Prof. Virendra Kumar Tewari Indian Institute of Technology Kharagpur



anusūcī

bauddhika ātmanirbharatā with special reference to Science and Technology

Vişaya evam sikşaka Y 1 Wednesday, 23 November bhārata kī jñāna paramparāyen DAY 3 vāstr

DAY 1	Wednesday, 23 November	DAY 3	Friday, 25 November
	bhārata kī jñāna paramparāyen		vāstukalā (Architecture)
09:00 - 10:30 Hours	History of India's Knowledge Systems Prof. B Mahadevan Indian Institute of Management Bangalore	09:00 - 10:30 Hours	Sources & Texts Prof. Joy Sen Indian Institute of Technology Kharagpur
11:00 - 12:30 Hours	India's Charateristic Knowledge Systems Prof. Kapil Kapoor Formerly - Indian Institute of Advanced Study	11:00 - 12:30 Hours	Schools & Thinkers Prof. Shankha Pratim Bhattacharya Indian Institute of Technology Kharagpur
14:00 - 15:30 Hours	svādhyāya & Lunch India's Epistemology (Introduction to Gautama's Nyaya-	14:00 - 15:30 Hours	Smt. Sashikala Ananth Ritambhara Ashram
The Toles hours	sutras: India's earliest epistemological work) Prof. K Ramasubramanian Indian Institute of Technology Bombay	16:00 - 17:30 Hours	Applications and the Way forward Ar. Aabhas Maldahiyar Author
DAY 2	Thursday, 24 November	DAY 4	Saturday, 26 November
	khagola vijñāna (Astronomy)		āyurveda
07:30 - 08:30 Hours	Ontological Framework of Indian Knowledge Systems Swami Medhananda Vedanta Society of Southern California	09:00 - 10:30 Hours	Sources & Texts Dr. Ashwinkumar Patel Sri Sri Tattva Panchkarma
09:00 - 10:30 Hours	Sources and Texts Dr. Raj Vedam Hindu University of America	11:00 - 12:30 Hours	Schools & Thinkers Vaidya P Rammanohar Amrita Vishwa Vidyapeetham
11:00 - 12:30 Hours	Cogent Statement of Knowledge and Ideas (Means of knowledge and Ideas in Indian Astronomy) Prof. K Ramasubramanian Indian Institute of Technology Bombay	14:00 - 15:30 Hours	Svādhyāya & Lunch Cogent Statement of Knowledge and Ideas Prof. Darshan Shankar The University of Trans-Disciplinary Health Sciences and Technology
14:00 - 15:30 Hours	Schools & Thinkers Dr. Mahesh K Indian Institute of Technology Kharagpur	16:00 - 17:30 Hours	Applications and the Way forward Sh. Madhusudhan Chauhan Jiva Ayurveda
16:00 - 17:30 Hours	Applications and the Way forward Prof. M S Sriram Prof. K V Sarma Research Foundation	18:30 - 20:00 Hours	abhisārasthānam Smt. Parvathy Baul Sādhika, Performer, Teacher of Baul Tradition

DAY 5 Monday, 28 November DAY 7 kṛṣi vijñāna (Agriculture) 09:00 - 10:30 Hours Sources, Texts, Schools & Thinkers Prof. Ganti S Murthy | IKS Division of MoE @ AICTE 09:00 - 10:30 Hours Cogent Statement of Knowledge and 11:00 - 12:30 Hours Ideas | Applications and the Way forward Dr. Prabhakar Rao **Schools & Thinkers** 11:00 - 12:30 Hours Sri Sri Institute of Agricultural Sciences and Technology Prof. Omkar Nath Mohanty | RSB Group svādhyāya & Lunch svādhyāya & Lunch paryāvaraņa vijñāna 14:00 - 15:30 Hours (Environmental Sciences) Sources, Texts, Schools & Thinkers 14:00 - 15:30 Hours Dr. Anil Joshi | Himalayan Environmental 16:00 - 17:30 Hours Studies and Conservation Organization Cogent Statement of Knowledge and Ideas 16:00 - 17:30 Hours Applications and the Way forward Dr. Mansee Bal Bhargava | Entrepreneur **Tuesday, 29 November** DAY 8 DAY 6 ganita (Mathematics) Sources, Texts, Schools & Thinkers 09:00 - 10:30 Hours Dr. Aditya Kolachana | Indian Institute of Technology Madras 09:00 - 10:30 Hours Cogent Statement of Knowledge and Ideas | Applications 11:00 - 12:30 Hours and the Way forward 11:00 - 12:30 Hours Prof. Somesh Kumar | Indian Institute of Technology Kharagpur svādhyāya & Lunch chandaḥśāstra (Prosody) 14:00 - 15:30 Hours Sources, Texts, Schools & Thinkers 14:00 - 15:30 Hours Prof. Rani Sadasiva Murty | National Sanskrit University 16:00 - 17:30 Hours Cogent Statement of Knowledge and Ideas | Applications 16:00 - 17:30 Hours and the Way forward Prof. Kapil Kapoor | Formerly - Indian Institute of Advanced Study

Wednesday, 30 November rasa-śāstra evam dhātu vijñāna (Chemistry & Metallurgy) **Sources & Texts**

Dr. V Ramanathan | Indian Institute of Technology (BHU) Varanasi

Cogent Statement of Knowledge and Ideas Prof. B N Jagatap | Indian Institute of Technology Bombay

Applications and the Way forward (Hindu rasayana: From Alchemy to Modern Chemistry) Prof. Pratim Kumar Chattaraj Indian Institute of Technology Kharagpur

Thursday, 1 December

rājya, samāja va śāsana tantra (State, Society and Polity)

Sources & Texts Dr. Nagaraj Paturi | INDICA **Schools & Thinkers** Ms. Ami Ganatra | Brhat Culture Creative LLP

svādhyāya & Lunch

Cogent Statement of Knowledge and Ideas Sh. Raghava Krishna | Bṛhat Culture Creative LLP

Applications and the Way forward Prof. Satish Y Deodhar Indian Institute of Management Ahmedabad

DAY 9	Friday, 2 December pramāṇa vijñāna (Cognitive Sciences)	DAY 11	Monday, 5 December
			ānvīkṣikī (Logic and Disputation)
09:00 - 10:30 Hours	Sources & Texts Pravrajika Divyanandaprana <i>Sri Sarada Math</i>	09:00 - 10:30 Hours	Sources & Texts Prof. Dr. ShashiPrabha Kumar Indian Institute of Advanced Study
11:00 - 12:30 Hours	Schools & Thinkers Dr. H R Nagendra Swami Vivekananda Yoga Anusandhana Samsthana	11:00 - 12:30 Hours	Schools & Thinkers Srinivas Jammalamadaka <i>Kavikulaguru Kalidas Sanskrit University</i>
	svādhyāya & Lunch		svādhyāya & Lunch
12:45 - 14:15 Hours	Cogent Statement of Knowledge and Ideas Prof. N Ganesh Rao ACT Yoga	14:00 - 15:30 hours	Cogent Statement of Knowledge and Ideas Prof. Shrinivasa Varakhedi Central Sanskrit University
16:00 - 17:30 Hours	Applications and the Way forward Prof. Girishwar Misra <i>Formerly - University of Delhi</i>	16:00 - 17:30 Hours	Applications and the Way forward Prof. Kapil Kapoor Formerly Indian Institute of Advanced Study
DAY 10	Saturday, 3 December	DAY 12	Tuesday, 6 December
	bhāṣā va vyākaraṇa (Language and Grammar)		niyuddha kalā (Martial Arts)
		09:00 - 10:30 Hours	Sources, Texts, Schools & Thinkers Dr. D. V. Harri and Dr. D. V. Harris Harris Bloggesth Course
09:00 - 10:30 Hours	Sources & Texts Dr. Dipesh Vinod Katira & Dr. Jayashree A Gajjam Indian Institute of Technology Kharagpur	11:00 - 12:30 Hours	Dr. D K Hari and Dr. D K Hema Hari Bharath Gyan Cogent Statement of Knowledge and Ideas Applications and the Way forward Dr. S Mohach Agasthyaga Kalapingyattu
11:00 - 12:30 Hours	Schools & Thinkers Prof. Kapil Kapoor Formerly - Indian Institute of Advanced Study		Dr. S Mahesh Agasthyam Kalaripayattu svādhyāya & Lunch
	svādhyāya & Lunch		yuddha vidyā (Military Sciences)
14:00 - 15:30 Hours	Cogent Statement of Knowledge and Ideas Prof. Shrinivasa Varakhedi Central Sanskrit University	14:00 - 15:30 Hours	Sources, Texts, Schools & Thinkers Lt. Gen. P G Kamath Formerly - Commandant of Army War College, Mhow, India
16:00 - 17:30 Hours	Applications and the Way forward Dr. Anuradha Choudry IKS Division of MoE @ AICTE	16:00 - 17:30 Hours	Cogent Statement of Knowledge and Ideas Applications and the Way forward Brigadier (Dr.) Prof J S Rajpurohit Formerly - Indian Army
18:30 - 20:00 Hours	Special Session Sh. J Sai Deepak Author and Lawyer at Supreme Court	18:30 - 20:00 Hours	Tribhangā: Ruminations on the Body in Indian Thought
		2	Sh. Bandeep Singh Group Photo Editor, India Today & Professional Photographer - Artist

Wednesday, 7 December **DAY 13 DAY 14** Bharata's nāṭyaśāstra (Science of Drama, Dance and Music) 09:00 - 10:30 Hours **Sources & Texts** Dr. Sonal Mansingh | Centre for Indian Classical Dance **Schools & Thinkers** 11:00 - 12:30 Hours Dr. Sonal Mansingh | Centre for Indian Classical Dance 09:00 - 10:30 Hours svādhyāya & Lunch 14:00 - 15:30 hours Cogent Statement of Knowledge and Ideas 11:00 - 12:30 Hours Prof. Bharat Gupt | Indira Gandhi National Centre for the Arts Applications and the Way forward 16:00 - 17:30 Hours Prof. Sushant Kumar Mishra | Jawaharlal Nehru University 14:00 - 14:40 Hours 14:45 - 15:30 Hours 16:00 - 17:00 Hours

Thursday, 8 December

bhāratīya jñāna praņālī saṃbhāvanā evam abhigraha (IKS and Big Possibilities & Challenges: Systemic, Methodological, Pedagogical, **Competencies**)

Possibilities and Challenges

Prof. Amitabha Ghosh | Emeritus Scientist of Indian National Science Academy

Pedagogical, Methodological | Workshop

Prof. Shekhar P Seshadri | Formerly - NIMHANS

Sh. Hari Kiran | INDICA

Sh. Bandeep Singh | India Today

Sh. Raghava Krishna | Bṛhat Culture Creative LLP

svādhyāya & Lunch

Reflections, **Opportunities & Way Forward**

Reflections

Select FDP IKT: RPM 2022 Participants

Opportunities

Dr. Richa Chopra | Indian Institute of Technology Kharagpur

Way Forward | Panel Discussion

Prof. Kapil Kapoor | Formerly - Indian Institute of Advanced Study; Prof. Joy Sen | Indian Institute of Technology Kharagpur

MEANT FOR WHOM & ELIGIBILITY

Teaching faculty of universities and colleges across all academic disciplines as part of the Career Advancement Scheme (CAS) guidelines laid by UGC-HRDC. Certificates of Completion will be provided at the end of the program subject to the fulfilment of the terms and conditions laid by UGC-HRDC.

LIVE-STREAM

The program will be LIVE-streamed for those who may like to listen to the lectures. The LIVE-stream audience shall not be required to register and neither shall they be awarded any certificates.

https://iks-iitkgp.in/fdp2022/live-streaming.html

*REGISTRATION

Registration Fee: INR 1180/- (includes GST @18%)

Seats: 60 (first come first serve)

Registrations close by: 21 Nov, 10 pm (IST)

Venue: IIT Kharagpur

Register at: (https://iks-iitkgp.in/fdp2022/register.html)

*(applicable only for teaching faculty from HEIs and in case of cancellation, deposit amount paid is non-refundable)

We Are Available

Principal Coordinator & Curator

Dr. Richa Chopra

(Core Faculty, CoE-IKS, IIT KGP) richachopra@iks.iitkgp.ac.in

Coordinator - Organizing

Dr. Arnab Hazra
(CoE-IKS, IITKGP)

Member Coordinators

(Core Faculty, CoE-IKS, IIT KGP)

Dr. Jayashree A Gajjam

jayashree@iks.iitkgp.ac.in

Dr. Mahesh K

Dr. Dipesh V Katira

Support

(PhD Research Scholars)

Ramakant Nayak

Krishna Kumar



Patrons

Prof. Kapil Kapoor

Formerly - Indian Institute of Advanced Study (IIAS)

Prof. Geeta Singh

CPDHE (UGC - HRDC), Univ. of Delhi

Core Committee Members

Raghava Krishna

Brhat Culture Creative LLP

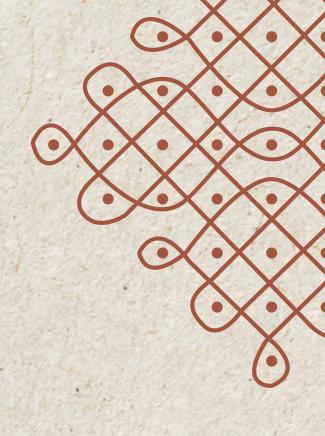
Prof. Ganti S Murthy | Dr. Anuradha Choudry

IKS Division of MoE @ AICTE

Internal Advisors

Prof. Joy Sen | Prof. Somesh Kumar Indian Institute of Technology Kharagpur

contents subject to last minute changes





Where are We *Located

Centre of Excellence for Indian Knowledge Systems,
Indian Institute of Technology Kharagpur, Hijli Shaheed Bhawan, Kharagpur, PIN Code: 721302, West Bengal (INDIA)
www.iitkgp.ac.in



*Hijli Detention Camp (now called Shaheed Bhavan, IIT Kharagpur) is a former detention camp operated during the period of British colonial rule in India. Located in Hijli, beside Kharagpur, (a part of former Hijli Kingdom) in the district of Midnapore West, West Bengal, India, it played a significant role in the Indian independence movement of the 19th and 20th Centuries.