



# INSTITUTE OF LIFE SCIENCES

Bhubaneswar

**May 18, 2018****30<sup>TH</sup> GOVERNING BODY MEETING**

**Dr. Renu Swarup,**  
**Secretary, Department of**  
**Biotechnology**

released the ILS  
Newsletter (Jan-May  
2018), with other  
members of the  
Governing Body, at ILS,  
Bhubaneswar.

## HIGHLIGHTS

- Foundation Stone Laying of the ILS-IBSD Partnership Centre
- Inauguration of Hostel at campus 2.
- Open Day Science Exposition jointly organised by ILS and RMRC.
- ILS Flagship Programme.
- 70<sup>th</sup> Republic Day Celebration at ILS.
- SAC, 2018.
- ILS in IISF, Lucknow.
- Swachh Bharat.

### Dr. Amaresh C Panda's Group



Traditionally, RNA molecules are believed to convey genetic information encoded in the DNA into the synthesis of specific proteins. In the 1950s, the biological function of noncoding (nc)RNAs started with the discovery of transfer RNA and ribosomal RNA. Since then, the number and types of functional ncRNAs in the cells are rising with the discovery of small nuclear (sn)RNAs, piwi-interacting (pi)RNA, long (l)ncRNAs, miRNAs, and poorly explored circular (circ)RNAs. CircRNAs are a large class of ubiquitously expressed novel ncRNAs reported to

regulate gene expression by modulating the function of miRNAs and RBPs. Although thousands of circRNAs have been identified, only a handful of them is functionally characterized to have biological significance. The circRNA field is still in an immature stage. Our group is interested in exploring the role of poorly characterized circRNAs in the post-transcriptional gene regulatory mechanisms. Currently, we are developing new technologies to isolate, identify and understand the function of circRNAs in physiological processes including insulin biosynthesis and muscle regeneration.

### Dr. Rupesh Dash's Group



Oral Squamous Cell Carcinomas (OSCC), an aggressive form of HNSCC, contributes to the highest number of cancer related death in India. Majority of the OSCC patients are commonly diagnosed with locally advanced stage of cancer. As per standard guidelines, the treatment modalities for advanced OSCC involve surgical removal of primary tumors followed by concomitant chemo radiotherapy. In spite of having a lot of advances in treatment modalities, the overall 5-year survival rate for advanced OSCC is ~50%. Chemo resistance is one of the important factors for treatment failure in OSCC, which can culminate in continued tumor growth and metastatic spread.

The major research focus in the lab are-

- To understand the molecular mechanism of tumor chemo resistance.
- To identify the causative factors those responsible for acquired chemo resistance.
- To identify agents that can restore cell death in drug resistant OSCC.

## Scientific Advisory Committee June 25-26, 2018



The Scientific Advisory Committee meeting was organised at the ILS, Bhubaneswar during 25th-26<sup>th</sup> June, 2018. The meeting was chaired by Dr. Satyajit Rath, Agharkar Research Institute (ARI), Pune. Scientists of four disciplines viz. Cancer biology, Genetic and autoimmune diseases, Plant and microbial biotechnology, and Infectious diseases presented their ongoing research projects and the SAC jury discussed and evaluated the progress of the same. Poster sessions were held for students which were reviewed by the SAC jury members. The suggestions of the SAC members were taken well.

## Aspirational District Programme

With support from DBT, ILS is undertaking a project on “Technology Interventions for ensuring Food and Nutrition Security of Rural Communities” with an overall objective of contributing to enhancing farmer’s capacity and farmer led initiatives for enhanced production, income of small and marginal farming communities for improving their health and nutrition status, in Nabarangapur, Odisha. This program is being implemented in partnership with Regional Medical Research Centre, Bhubaneswar and KISS University, Bhubaneswar.

## Open Day Science Exposition jointly organised by ILS and RMRC.

September 27–28, 2018

Opening its doors to spread scientific awareness amongst the greater mass and school students, ILS and RMRC jointly organised a 2-day Open Science Exposition on 27<sup>th</sup> and 28<sup>th</sup> September, 2018. The exposition was a great success with participation of around 1000 students from over 40 schools, several research institutes and inquisitive public. The demonstration session which consisted of display of various facets of research tools and technologies was received enthusiastically by curious young minds. Interesting was the question-and-answer session, where scientists were flanked with multitudes of questions related to all the spheres of science.



## ILS Flagship Programme

January 5<sup>th</sup>  
2019



ILS is undertaking an ambitious research initiative for addressing health, nutrition and well-being of tribal communities of Odisha, which accounts for about 22.1% of the tribal population of India. A flagship project, to comprehensively link genomic diversity, immune metabolic profile, nutrition status and microbiome diversity of the tribals of Sundergarh, Malkangiri, Mayurbhanj. A district level stakeholder meeting was organized under the Chairmanship of Shri S. K. Meena, District Collector, Sundergarh on January 4, 2019. The scientists of ILS visited the tribal dominated Tiljora panchayat of Subdega block and based on the extensive discussions with the communities on various issues and challenges in food, nutrition and health security, ILS has initiated a pilot study in this location for making a significant scientific contribution to it.

## Research Network on Genetic Enhancement of Minor Pulses

ILS has been designated as Program Management Unit of a major multi-institutional network project on “Characterization, Evaluation, Genetic Enhancement and Generation of Genomic Resources for Accelerated Utilization and Improvement of Minor Pulses”. This project was launched by DBT in October 2018. It has partnerships with 14 national institutions and agriculture universities. This network program is designed to carry out extensive investigations on underutilized legumes with a broad aim of enhancing farmers’ income in rain-fed areas. The first network meeting was organised at NBPGR, New Delhi on January 15, 2019.



## International Conference on Vectors and Vector Borne Diseases

January 9-11, 2019.

ILS joined hands with RMRC, Bhubaneswar for organizing a thematic symposium on New Biology Approaches for vector borne disease management.



The conference discussed the basic application and operational aspects of vector borne diseases. It provided a platform to students, academicians, scientists, professionals from pharmaceuticals & industry to find ways and means for fighting against the scourge of vector borne diseases.

## International Plant Physiology Congress (IPPC-2018), Lucknow

December 2<sup>nd</sup> – 5<sup>th</sup>, 2018

Indian Society of Plant Physiology and National Botanical research Institute, organized this conference bringing together leading scientists and young investigators from across the world to discuss their exciting research outcomes. The conference covered major areas of plant biology research including Biotic and Abiotic Stress Physiology; Genomics-assisted Breeding; Plant Productivity and Modelling; Genomics, Epigenomics; Gene Regulation; Computational and Systems Biology; Pathway Engineering; Reproductive Biology and Post-Harvest Biology. ILS was associated in organization of the event.

## Workshop on Microtomy/Ultra-microtomy

July 16-17, 2018

The Workshop on Microtomy/ Ultra-microtomy, staining and imaging techniques, was held at ILS, Bhubaneswar. The workshop was intended to refine the skills of the research scholars. The day came to an end with a group photo session.





## Swacch Bharat

October 2nd, 2018

Gandhi Jayanti was celebrated with the theme of 'Swacchta' (Cleanliness), Scientists and scholars participated in cleaning the streets in and around ILS, followed by planting trees.



The scholars of ILS kept everyone hooked up when they displayed their talents through Dance, singing, poetry and skit.



## Signing of MOU with DBT

July 3, 2018

Memorandum of understanding was signed by Dr. Ajay Parida, Director, ILS and Dr. Renu Swarup, Secretary DBT on July 3, 2018 for the Financial Year 2018-19 in presence of. Shri B. Anand, IAS, AS&FA, DBT; Shri C. P. Goel, IFS, JS, DBT and Dr. Meenakshi Munshi, Advisor, DBT, and other DBT institute Directors.

## ILS in IISF, Lucknow

October 5<sup>th</sup>-8<sup>th</sup>, 2018

ILS participated with its team comprising of 7 research scholars, 1 research associate along with scientist Dr. D V Singh and Dr. Ajay Parida, Director, ILS. The team enthusiastically engaged people from all walks of life in research activities of ILS through poster presentation, quiz and various intellectual games.

## Foundation Stone Laying of the ILS-IBSD Partnership Centre

May 18, 2018



Foundation Stone of the ILS-IBSD partnership Centre was laid by Dr. Renu Swarup, Secretary, Department of Biotechnology, GOI in the presence of Shri. B. Anand, AS & FA, DBT, Dr. Dinabandhu Sahoo, Director, IBSD, Dr. Meenakshi Munshi, Advisor, DBT, Dr. Sudhir Sopory, Dr. A. P. Das, VC, Central Univ. Tamil Nadu; Dr. SM Patnaik, VC, Utkal University, Sanghamitra Pati, Director, RMRC, Shri Nikuja Dhal, Principal Secretary, Science and Technology, Govt. of Odisha

## National consultation on Infectious Disease May 9-10, 2018

ILS organized a consultation on infectious disease biology for focusing on disease surveillance, diagnostics and advanced biotechnological approaches for developing effective therapy and cure. The participants called for focused research for understanding role of microbiota, pathogenesis, innate immune system and biology of vector borne pathogens, antimicrobial resistance (AMR) & anti-viral drug development.



## Visit of Students from Cotton University, Guwahati.

November 5<sup>th</sup>, 2018



## Summer Science School

May 22-29<sup>th</sup>, 2018

The students from schools of Odisha, visited ILS and explored the labs to get an overall idea of our research work.



## Inauguration of Guest house

May 18, 2018

Dr. Renu Swarup, Secretary, Department of Biotechnology, Government of India, inaugurated the Guest House and Hostel Complex of ILS at Campus -II.

## Activities

### Republic day



The 70th republic day was celebrated in ILS with great zest. Director Dr. Parida, gave a motivational speech on a Padmashri awardee Shrimati Kamala Pujari, who is a native of tribal-nominated Koraput for her exceptional inputs on paddy cultivation and preservation.



### Independence day

August 15, 2018

Celebration of 72nd Independence Day took place at ILS campus I. The entire ILS family participated with a feeling of patriotism. Director, Dr. Ajay Parida hoisted

the National Flag and addressed the staff and students commemorating the sacrifices of national patriots.

### Navratri



Navratri was celebrated with great enthusiasm from 10th October to 18th October, 2018. Each day was marked by a different colour code, and ILS family was happily twinning around. The last day's exuberance liberated through people having a gala time dancing and singing to classic garba tunes.



### Diwali

The festival of Lights was celebrated at ILS campus 2, where the scholars had all the supplies to colour the sky.



### ILS Day Out! Chilika December 29, 2018

Enjoying the pleasant winter breeze, the students, faculties and staff with their families went on an excursion and scientific tour to visit Barkul, Chilika. The central attraction of the tour was boating to the island of Kalijai temple, where migratory birds and dolphins were sighted. With food and interactive sessions, the day came to an end.



### Iftar Party



When ILS came together to celebrate Ramadhan, together. With Roohafzah's, colorful platter, and everybody opening the fast at the same time, the day came to an end with huge smiles on everybody's face.

### National Technology Day

May 11, 2018



ILS organized a symposium on "Recent Advances in Biotechnology for Food, Nutrition & Health Security" for science teachers from schools and colleges and research scholars as well as MSc. students from Universities.

January 1, 2019



The start of the year, 2019 was celebrated with an inspirational talk by Swami Sadananda Saraswati which awakened new perspectives and hope in the minds of young researchers

- Acharya N, Manohar K, Peroumal D, Khantagale P, Patel SK, Sahu SR and Kumari P (2018) **Multifaceted activities of DNA Polymerase eta: Beyond translesion DNA synthesis.** *Curr. Genetics*, (doi.org/10.1007/s00294-018-0918-5)
- Angermeyer A, Das MM, Singh DV, Seed KD (2018) **Seed Analysis of 19 Highly conserved Vibrio cholerae bacteriophages isolated from environmental and patient sources over a twelve-year period.** *Viruses* 10(7): 299; doi:10.3390/v10060299
- Panda S, Singh DV (2018) **Biofilm formation by ica-negative ocular isolates of Staphylococcus haemolyticus.** *Frontiers in Microbiology* 9:2687. doi:10.3389/fmicb.2018.02687.
- Barrodia P, Patra C and Swain RK (2018) **EF-hand domain containing 2 (Efhc2) is crucial for distal segmentation of pronephros in zebrafish.** *Cell & Bioscience*, 8:53
- Benjamin J.J., Luigi Lucini, Saranya J and Parida A (2018) **Metabolomic insights into the mechanisms underlying tolerance to salinity in different halophytes.** *Plant Physiology and Biochemistry*. <https://doi.org/10.1016/j.plaphy.2018.11.006>
- Benjamin, J.J., Krishnasamy, R., Jothiramshekar, S. Hanesan G, Parida A (2018) **Identification of salt-induced transcripts by suppression subtractive hybridization and their expression analysis under the combination of salt and elevated CO<sub>2</sub> conditions in Salicornia brachiata.** *Acta Physiol Plant* 40: 202. <https://doi.org/10.1007/s11738-018-2764-y>.
- Chaudhary M, Parida A, Raina N (2018) **DNA Composition and Mitotic Time Cycle Duration in the Evolution of Faba Bean and Its Wild Relatives** *Proceedings of the National Academy of Sciences, India Section B: Biological Sciences* 88:185–190.
- Chaudhary S, Madhu Krishna B, Mishra SK and Mishra DP (2018) **An Association of Caspase-10 (Ex 1228G&gt;A) Polymorphism with Breast Cancer Risk: A Meta-Analysis of Case-Control Studies.** *Human Genet Embryol*. doi:10.4172/2161-0436.1000152.
- Das A, Gorospe M, Panda AC (2018) **The coding potential of circRNAs.** *Aging* (in Press).
- Das D, Das A, Panda AC (2018) **Emerging role of long noncoding RNAs and circular RNAs in pancreatic  $\beta$  cells,** *Non-coding RNA Investigation*, 2 (In Press)
- Jain S, Dash P, Minz A, Satpathi S, Samal AG, Behera PK, Satpathi PS, Senapati S (2019) **Lipopolysaccharide (LPS) enhances prostate cancer metastasis potentially through NF- $\kappa$ B activation and recurrent dexamethasone administration fails to suppress it in vivo.** *Prostate* 79 (2):168-182.
- Jena KK, Kolapalli SP, Mehto S, Nath P, Das B, Sahoo PK, Ahad A, Syed GH, Raghav SK, Senapati S, Chauhan S, Chauhan S. (2018) **TRIM16 controls assembly and degradation of protein aggregates by modulating the p62-NRF2 axis and autophagy.** *EMBO J*. 14:37-48
- Jingde N, Ray R, Sinha S, Rana K, Singh SK, Khandagale P, Acharya N and Rai V (2018) **Cysteine mediated disulfide bond formation in RAGE V domain facilitates its functionally relevant dimerization.** *Biochimie*, 154, 55-61.
- Kanchan Kumari, Adhya AK, Rath AK, Reddy PB, Mishra SK (2018) **Estrogen-related receptors alpha, beta and gamma expression and function is associated with transcriptional repressor EZH2 in breast carcinoma.** *BMC Cancer* doi:10.1186/s12885-018-4586-0.
- Kumari K, Das B, Adhya A, Rath AK, Mishra SK (2018) **Genome-wide expression analysis reveals six contravened targets of EZH2 associated with breast cancer patient survival.** *Scientific Reports* (In Press)

- Madhu Krishna B, Sanjib Chaudhary , Aditya Panda ,Dipti Ranjan Mishra and Sandip K -Mishra. **Her2 Ile655Val polymorphism and its association with breast cancer risk: an updated meta-analysis of case-control studies.** Scientific Reports. 2018 May 9;8(1):7427. doi:10.1038/s41598-018-25769-y.
- Madhu Krishna B, Chaudhary S, Mishra DR, Naik SK, Suklabaidya S, Adhya AK and Mishra SK(2018) Estrogen receptor  $\alpha$  dependent regulation of estrogen related receptor  $\beta$  and its role in cell cycle in breast cancer. BMC Cancer doi: 10.1186/s12885-018-4528-x.
- Maji S, Shriwas O, Samal SK, Priyadarshini M, Rath R, Panda S, Majumdar SK, Muduly DK, Dash R. (2019) **STAT-3 and GSK3 $\beta$  mediated Mcl-1 regulation modulates TPF resistance in Oral squamous cell carcinoma.** Carcinogenesis (In press)
- Manohar K, Peroumal D and Acharya N (2018) **TLS dependent and independent functions of DNA polymerase eta (Polh/ Rad30) from Pathogenic Yeast Candida albicans.** Mol. Microbiology, 110 (5), 707-727
- Mehto S, Jena KK, Parej Nath, Chauhan S, Kolapalli SP, Das SK, Sahoo PK, Jain A, Taylor GA, and Chauhan S (2019) **The Crohn's disease risk factor IRGM limits NLRP3 inflammasome activation by impeding its assembly and by mediating its selective autophagy.** Molecular Cell (In press).
- Panda AC and Gorospe M (2018) **Identifying intronic circRNAs: progress and challenges.** Non-coding RNA Investig 2:34.
- Panda AC. **Circular RNAs Act as miRNA Sponges** (2018) Adv Exp Med Biol. 1087: 67-79.
- Pandey P, Rout PK, Das A, Gorospe M, Panda AC (2018) **RPAD (RNase R Treatment, Polyadenylation, and Poly(A)+ RNA Depletion) Method to Isolate Highly Pure Circular RNA.** Methods. pii: S1046-2023(18)30224.
- Patra D, Mukherjee S, Chakraborty I, Dash TK, Senapati S, Bhattacharyya R and Shunmugam R (2018) **Iron(III) Coordinated Polymeric Nanomaterial: A Next-Generation Theranostic Agent for High-Resolution T1-Weighted Magnetic Resonance Imaging and Anticancer Drug Delivery.** ACS Biomater. Sci. Eng., 4: 1738–1749
- Pradhan B, Guha D, Naik AK, Banerjee A, Tambat S, Chawla S, Senapati S, Aich P (2018) **Probiotics L. acidophilus and B. clausii Modulate Gut Microbiota in Th1- and Th2-Biased Mice to Ameliorate Salmonella Typhimurium-Induced Diarrhea.** Probiotics Antimicrob Proteins. 10.1007/s12602-018-9436-5.
- Saranya J, Benjamin J. J., Krishnasamy, R. Pal A. K., George S., Swaminathan R., and Parida A (2018) **Responses of selected C<sub>3</sub> and C<sub>4</sub> halophytes to elevated CO<sub>2</sub> concentration under salinity.** Current Science 115: 129-135.
- Saswat T, Sahoo N, Muduli S, Debata NK, Chattopadhyay S, Chattopadhyay S (2018) **Epidemiological trends and molecular dynamics of dengue, chikungunya virus infection, coinfection, and other undifferentiated fever during 2015-2016 in Odisha, India.** J Med Virol. doi: 10.1002/jmv.25307.
- Shrestha A, Khan A, Dey N (2018) **cis-trans Engineering: Advances and Perspectives on Customized Transcriptional Regulation in Plants.** Mol Plant. 11:886-898.
- Shuchi Smita, Abdul Ahad, Ghosh A, Biswas VK, Koga MM, Gupta B, Acha-Orbea H and Raghav SK (2018) **Importance of EMT Factor Zeb1 in cDC1 “MutuDC Line” Mediated Induction of Th1 Immune Response.** Front. Immunol., doi.org/10.3389/fimmu.2018.02604.
- Subudhi BB, Chattopadhyay S, Mishra P, Kumar A. (2018) **Current Strategies for Inhibition of Chikungunya Infection.** Viruses. doi: 10.3390/v10050235.
- Taviti AC, Beuria TK (2018) **Bacterial Min proteins beyond the cell division,** Crit Rev Microbiol. 11:1-11.





**Mr. Kirtal Hansdah**, Ph.D. student, received **Best Poster Award** for Genomics of Complex Disease, in 44<sup>th</sup> Annual Conference of the Indian Society of Human Genetics. Jan 30-1st Feb 2019. Title : *Association of COL1A1, BMP2 and BMP4 gene polymorphisms with susceptibility to Otosclerosis.*

**Mr. Sugandh Kumar**, Ph.D. student, received **Best Poster Award** in Genome India Conference. January 24, 2019. Title: *Identification of stage wise miRNA signature as potential biomarker in head and neck squamous cell carcinoma*



**Mr. Abdul Ahad**, Ph.D. student, received **Best Poster Award** in Genome India Conference. January 24, 2019. Title : *NCoR1: controlling the fate of immunogenic response in dendritic cells.*



**Mr. Kautilya Jena**, Ph.D. student received **The Inspiring Science Award** for the best published scientific paper in the Life Sciences from India organized by Cell Press and TNQ Network



ILS Scientist **Dr. Sanjeeb Sahoo** figured in the list of 'influential' researchers of the world. Only 10 scientists including Sahoo from India got entry into the list of 4000 researchers of the world.

**Viplov Kumar Biswas**, Ph.D. student, received **Best Poster Award** in IMMUNOCON 2018. 3 Nov 2018. Title : *NCoR1 regulates the molecular axis for Mycobacterium infection in myeloid cells through autophagic flux.*

## Ph.D Awarded

- **Dr. Sabindra Kumar Samal.** A novel ddx3 inhibitor to treat oral squamous cell carcinoma (Supervisor - Dr. R. Dash).
- **Dr. K. Manohar.** Characterization of DNA Polymerase Eta from pathogenic Yeast *Candida albicans* for its role in genomic instability morphogenesis and drug resistance. (Supervisor - Dr. N. Acharya).
- **Dr. Ravi Chandra Tagirasa.** T Cell immune response and Chronic Inflammatory diseases. (Supervisor - Dr. S. Devadas).
- **Dr. Shaifaly Parmar.** Identification and characterization of salt responsive miRNAs in rice cultivars. (Supervisor - Dr. B.P.Shaw).
- **Dr. Paromita Kundu.** Nanotechnology based drug delivery system for neurodegenerative disorders. (Supervisor - Dr. S.K.Sahoo).
- **Dr. Moonmon Das.** Genetic analysis of CTX-Positive and CTX-Negative *Vibrio Cholerae* strains. (Supervisor - Dr. D.V.Singh).
- **Dr. Ravindra Kumar.** Bioinformatics analysis of Cancer genes and identification of Novel drug targets. (Supervisor - Dr. A. Dixit).
- **Dr. Praveen Barrodia.** Function of Hypothetical proteins in Zebrafish organogenesis. (Supervisor - Dr. R. Swain ).
- **Dr. Madhu Krishna.** Post Translational modification of orphan estrogen receptor and its influence on its target genes in breast cancer cell lines. (Supervisor - Dr. S.K.Mishra).

14 SCIENCE & TECHNOLOGY THE HINDU

September 2, 2018  
**Drug target for neurodegenerative diseases and cancer discovered**  
 Decreasing the activity of TRIM6 protein can reduce tumour growth

**Defining positions**  
 Scientists at the Institute of Life Sciences (ILS), Bhubaneswar, have discovered that activity of a particular protein called TRIM6 is essential for the growth of neurodegenerative diseases such as Alzheimer's, Parkinson's and amyotrophic lateral sclerosis (ALS). At the same time, inhibiting the activity of this protein can bring about a reduction in tumour growth in cancer cells, as well as in the growth of neurodegenerative diseases.

**CRISPR on edge**  
 Scientists at the Institute of Life Sciences (ILS), Bhubaneswar, have used the CRISPR-Cas9 gene editing technology to study the role of TRIM6 protein in neurodegenerative diseases and cancer. The study, published in the journal Nature Communications, shows that TRIM6 is essential for the growth of neurodegenerative diseases and cancer. The study also shows that inhibiting the activity of TRIM6 protein can reduce tumour growth in cancer cells, as well as in the growth of neurodegenerative diseases.

**Odia scientist in list of world's 'influential' researchers**

Hemanta Pradhan | TNN | Jan 4, 2019, 19:17 IST

**Sanjeeb Sahoo**  
 Institute of Life Sciences Bhubaneswar  
 PhD in chemistry from Delhi University  
 Specialisation | Use of nanotechnology in cancer drug delivery, especially in cancer cure

Mass Edu Min to open ILS-RMRC science meet

**PHS BHUBANESWAR**  
 The Institute of Life Sciences (ILS) and the Regional Medical Research Centre (RMRC), Bhubaneswar are jointly going to organise a science exhibition and an open day at the ILS and RMRC-OPD centre here on September 22 and 23, informed ILS Director Dr Ajay Parida at a Press meet here on Tuesday.

He said the seminar would be inaugurated by School and Mass Education Minister Balesar Narayana Patra in presence of Science and Technology Secretary Nikunja Dhal and NSER Director Dr Subhadra Panda.

He said leading scientific

choose career in science. They would also be interacting with experts and visiting the advanced laboratories of ILS and RMRC.

Eminent scientists, Ravenshaw University Vice-Chancellor Dr Ishan Patro, State Higher Education Council Vice-Chairman Prof Ashok Das and Dr Swamy Prakash Rout along with scientists from ILS and RMRC would address and interact with the students.

The seminar is being organised as a

**sunday pioneer**  
 'Engage public with scientific developments'

**Two-day event inaugurated at ILS**  
 PHS BHUBANESWAR

Scientific institutions will need to engage and disseminate significant developments to public at large so that science is effectively linked to society, said Science and Technology Principal Secretary Nikunja Dhal while inaugurating a two-day science outreach programme at the Institute of Life Sciences (ILS), here.

Dhal called for more interaction and collaboration among scientific institutions in Bhubaneswar and called for efforts to make Bhubaneswar as a knowledge hub for the eastern India.

Students also interacted with the experts and visited the

stressed on the need for more basic research. Among others, RMRC students taking fun and developing ILS.

**ମହାନଗର**  
 ଆଇଏଲଏସ୍‌ରେ ହେବ ବିଜ୍ଞାନ ପ୍ରଦର୍ଶନୀ

ବିଜ୍ଞାନ ପ୍ରଦର୍ଶନୀର ଉଦ୍ଦେଶ୍ୟ ହେଉଛି ଶିଶୁମାନଙ୍କୁ ବିଜ୍ଞାନ ସହିତ ଯୋଗାଯୋଗ କରିବା ଏବଂ ସେମାନଙ୍କର ବିଜ୍ଞାନ ପ୍ରତି ଆଗ୍ରହକୁ ବୃଦ୍ଧି କରିବା। ଏହାଛଡ଼ା, ଏହା ବିଜ୍ଞାନର ଉପଯୋଗୀତା ଏବଂ ବିଜ୍ଞାନର ମାଧ୍ୟମରେ ସମାଜର ଉନ୍ନତିକୁ ସମ୍ଭାବ୍ୟ କରିବାକୁ ସହାୟକ କରିବ।

ବିଜ୍ଞାନ ପ୍ରଦର୍ଶନୀର ଉଦ୍ଦେଶ୍ୟ ହେଉଛି ଶିଶୁମାନଙ୍କୁ ବିଜ୍ଞାନ ସହିତ ଯୋଗାଯୋଗ କରିବା ଏବଂ ସେମାନଙ୍କର ବିଜ୍ଞାନ ପ୍ରତି ଆଗ୍ରହକୁ ବୃଦ୍ଧି କରିବା। ଏହାଛଡ଼ା, ଏହା ବିଜ୍ଞାନର ଉପଯୋଗୀତା ଏବଂ ବିଜ୍ଞାନର ମାଧ୍ୟମରେ ସମାଜର ଉନ୍ନତିକୁ ସମ୍ଭାବ୍ୟ କରିବାକୁ ସହାୟକ କରିବ।

Research centre at ILS to focus on bio-resources

**PHS BHUBANESWAR**  
 The Institute of Life Sciences (ILS) is planning to set up a research centre focusing on bio-resources, informed ILS Director Dr Ajay Parida at a Press meet here on Tuesday.

He said the research centre will be set up in the area of advanced biotechnology research and development. The centre will focus on the study of bio-resources and their potential for the development of new drugs and vaccines.

The research centre will be headed by Dr Subhadra Panda, Director of the Centre for Advanced Biotechnology Research and Development. The centre will also have a team of scientists and students working on various projects related to bio-resources.

**atesman**  
 NICOTINE HAS SIGNIFICANT ROLE IN BREAST CANCER: ILS EXPERTS

**Nicotine has significant role in breast cancer: ILS experts**

drug named DZNepA and showed reduced breast tumor growth in the mice model," Dr Mishra told during the seminar held here. Findings provide preliminary evidence suggesting potential of high level of E2H2 expression as a prognostic marker in smoking-associated breast cancer, he added.

"The highlighted part of the

**ପ୍ରଗତିବାଦୀ**  
 ଶୁଣାଣି ସମ୍ମାନ ପ୍ରଦାନ କରାଯାଇଛି

**ରାଜ୍ୟର ସବୁ ଜିଲ୍ଲାରେ ଖୋଲିବ ବିଜ୍ଞାନ କେନ୍ଦ୍ର**

ରାଜ୍ୟର ସବୁ ଜିଲ୍ଲାରେ ବିଜ୍ଞାନ କେନ୍ଦ୍ର ଖୋଲିବ। ଏହା ବିଜ୍ଞାନର ଉପଯୋଗୀତା ଏବଂ ବିଜ୍ଞାନର ମାଧ୍ୟମରେ ସମାଜର ଉନ୍ନତିକୁ ସମ୍ଭାବ୍ୟ କରିବାକୁ ସହାୟକ କରିବ।

Union Secy lays stone for ILS facility

**PHS BHUBANESWAR**  
 Union Secretary Dr Biju Singh laid the foundation stone of a research centre with partnership between Institute of Life Sciences (ILS), Bhubaneswar, and the Institute of Bio-Technology (IBT), Bhubaneswar, on Tuesday.

The inauguration was held in the presence of Union Secretary Dr Biju Singh, Science and Technology Secretary Nikunja Dhal and ILS Director Dr Ajay Parida. The research centre will focus on the study of bio-resources and their potential for the development of new drugs and vaccines.

The research centre will be headed by Dr Subhadra Panda, Director of the Centre for Advanced Biotechnology Research and Development. The centre will also have a team of scientists and students working on various projects related to bio-resources.

## Upcoming Events

- Meeting of the **Finance Committee** of ILS, 25 February 2019, New Delhi.
- Science Outreach Program** for School and College students in commemoration of National Science Day, February 28, 2019, Bhubaneswar and Seven District (Cuttack, Rayagarha, Sambalpur, Mayurbhaj, Jajpur, Dhenkanal, Baragarh) of Odisha.
- State Level **Convention of Women Scientists and Technologists** in commemoration with the International Women Day, March 8, 2019, Bhubaneswar.
- Symposium on **Science and Technology for Human Well-being**, March 18-19, 2019, Bhubaneswar

## Editors



Shaheerah Khan



Priya Singh



Gargee Bhattacharya

# Adyant '19

## New Year Celebration at ILS

