



राष्ट्रीय औषधीय शिक्षा एवं अनुसंधान संस्थान—हाजीपुर

NATIONAL INSTITUTE OF PHARMACEUTICAL EDUCATION AND RESEARCH (NIPER) - HAJIPUR

(Department of Pharmaceuticals, Ministry of Chemicals & Fertilizers, Govt. of India)

Export Promotions Industrial Park (EPIP), Industrial Area, Hajipur

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MINUTES OF THE 4TH MEETING OF ACADEMIC PLANNING AND DEVELOPMENT COMMITTEE (APDC), NIPER HAJIPUR

Date: 06.04.2023 Time: 12:00 Noon (Through Hybrid Mode)

Members Present :

Sl.N.	Name and Affiliation	
1	Dr. USN Murty, Director, NIPER-Guwahati	Chairman
2	Dr. V. Ravichandiran, Director, NIPER-Hajipur	Member
3	Dr. Satish Bhise, Former Principal, Govt. College of Pharmacy, Karad, Maharashtra	Member
4	Dr. Pradip Das, Former Director, RMRIMS, Patna	Member
5	Dr. Om Kumar, Prof. & Head, Dept. of N&RT, IGIMS, Patna	Member
6	Dr. Vipin Kumar Parihar, Dean (I/C), NIPER Hajipur	Member Secretary

The members could not attend the meeting due to pre-engagements.

1	Dr. Nihar Ranjan Biswas, Director, IGIMS, Patna, Bihar
2	Dr. Rajendra Singh, Principal, Rajputana College of Pharmacy, Bangalore
3	Dr. R. Ravishankar, Chief Scientist & Head, MSB Division, CSIR-CDRI, Lucknow
4	Dr. D. Prabhakaran, CCDC, New Delhi

At the outset the Hon'ble Chairman, Prof. U.S. Murty welcome all the members of APDC, NIPER-Hajipur and expressed his thanks to all the members to giving their valuable time despite their busy schedule.

Further, he briefed about the progress made of the Institute since its last meeting. Thereafter, Agenda Items were taken up as under:

Agenda No.	Item																		
Item No.01/4 th APDC/2023	Confirmation for ATR and Minutes of 3 rd Meeting of the APDC held on 26.02.2022. (Annexure-1)																		
Resolution	The APDC considered the "Action Taken Report" and approved the same. Further, resolved to confirm the Minutes of the 3 rd Meeting of APDC held on 26.02.2022.																		
Item No.02/4 th APDC/2023	Seat Distribution for the Academic Year: 2023-24																		
Resolution	In consonance to the Target set by the Department of Pharmaceutics (DoP), the Institute has proposed following seat distribution for consideration of the APDC Members: Student intake for the Academic year 2023-24 <table border="1"><thead><tr><th></th><th>Niti Aayog Target for the Academic Year 2023-24</th><th>Proposed Student Intake</th></tr></thead><tbody><tr><td>Total student intake for the academic year 2023-24</td><td>140</td><td>140</td></tr></tbody></table> Student intake in the MASTERS' PROGRAMMES for the academic year 2023-24 <table border="1"><thead><tr><th>Courses</th><th>Disciplines</th><th>No. of Seats</th></tr></thead><tbody><tr><td>M.S (Pharm)</td><td>Biotechnology</td><td>18</td></tr><tr><td>M.S (Pharm)</td><td>Pharmaceutics</td><td>16</td></tr><tr><td>M.S (Pharm)</td><td>Pharmacology and Toxicology</td><td>18</td></tr></tbody></table>		Niti Aayog Target for the Academic Year 2023-24	Proposed Student Intake	Total student intake for the academic year 2023-24	140	140	Courses	Disciplines	No. of Seats	M.S (Pharm)	Biotechnology	18	M.S (Pharm)	Pharmaceutics	16	M.S (Pharm)	Pharmacology and Toxicology	18
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Item No.03/4th APDC/2023	Commencement of new course from Academic Year 2023-24: M. Tech. in Bio-Pharmaceuticals.																											
<i>Resolution</i>	<p>For strengthening of Academic and Research, the institute has proposed to introduce a new course “M.Tech. in Bio-Pharmaceuticals” from Academic Year : 2023-24. The Syllabus for the course be critically</p> <p>The Committee members welcome the proposal to start new course M.Tech. in Bio-Pharmaceuticals. Some of the Committee Members offered their comments:</p> <p>Dr. Pradeep Das: He welcomed this proposal. Dr. Om Kumar: This type of course will help for cost cutting in Bio-Pharmaceutics. Dr. Satish Bhishe : The Biosimilar and Vaccine area to be also focused that will help in employability.</p> <p>Further, the Committee recommend and resolved for commencement of new course “M.Tech. in Bio-Pharmaceuticals” from Academic Year : 2023-24 with Intake of 10 seats in PG and 02 seats in Ph.D. programme.</p>																											
Item No.04/4th APDC/2023	Placement Planning for the passing batch in June 2023.																											
<i>Resolution</i>	<p>The stapes taken by the Training and Placement Cell, NIPER Hajipur for placement for Passing Batch in June 2023:</p> <ul style="list-style-type: none"> • The training and Placements cell has designed the “Compendium of CVs of 2022-23 batch” for circulating to the pharma companies. • The cell already conducted “Alumni meet 2022” on 12th July 2022, and now more than 300 Alumnus has been connected through social media. • The placement cell has sent invitation to several pharma companies based on the skills and specialization of pass out batch 2022-23, among them about 7 companies positively responded for conducting interview in May-June 2022. 																											

	<p>Companies already conducted interviews this year –</p> <ul style="list-style-type: none"> • Xogene (7 Lakhs/Annum) • BijusAkash • Gland Pharma • Generic Green Pvt. Ltd. <p>We have invited the following companies, but they are ready to conduct interviews only at the end of their M.S thesis submission, not now.</p> <ul style="list-style-type: none"> • Syngene • Microlabs • Novartis • Biocon • Aurobindo • Fryer • Zydus • Zuventus • VIVO Biotech <p>Future events –</p> <ul style="list-style-type: none"> • Training on Soft-skills, interview skills, Stress and time management (April 2023) • 7 companies are expected to conduct interview in April-May 2023 <p>The Committee appreciate the efforts made by the Training and Placement Cell and further suggested that in future the type of job/higher education be clearly figured to understand.</p>
<p>Item No.05/4th APDC/2023</p>	<p>Establishment of Centre for Excellence (CoE) in Biological Therapeutics</p>
<p><i>Resolution</i></p>	<p>Introduction: Biotherapeutics are at the forefront of biomedical research and has been used to treat a variety of medical conditions for which no other treatments are available. Biotherapeutics have a good market potential and is anticipated to grow at a compound annual growth rate (CAGR) of 24.7% to \$35.7 billion in 2025, globally. The Indian market is also expected to reach \$12 billion by 2025 at a CAGR of 22%. In India, biosimilars for insulin, erythropoietin (EPO), and monoclonal antibodies dominate the market. In view of this, NIPER Hajipur is poised to establish a CoE in Biological Therapeutics to meet the requirements of self-reliance (Atma Nirbhar Bharat), where science could serve as a bridge in filling the knowledge gaps to produce cheaper biotherapeutics of consistent quality.</p> <p>Mission: The mission of CoE in Biological Therapeutics is to accelerate and strengthen the drug discovery process by development of biotherapeutics and to enhance the affordable healthcare opportunities of individuals in India.</p> <p>Vision: The CoE in Biological Therapeutics envisions the “Make in India” initiative, to be a global manufacturing hub for safe, low-cost, and efficacious biotherapeutics. We focus on research innovations to address the gap faced in the development of biotherapeutics in India, finding solutions in new ways, developing ‘individualized’ tangible solutions, and bringing product to the real-world.</p> <p>Main Objectives:</p>

Phase I

- Strategies for bioprocessing of monoclonal antibodies and antibody-drug conjugates
- Anti-sense oligonucleotide platform for rare genetic disorders
- Platforms for reproducible organoid culture from patient-derived and patient specific iPSC
- Regenerative medicine/Tissue engineering - to create biological substitutes (biomaterials, stem cells, secretome, extracellular vesicles) to repair or replace damaged organs or tissues.

Phase -II

- Oligosaccharide immunomodulators
- mRNA-based protein replacement therapy
- CRISPR-Cas based gene editing.

Phase -III

- To develop the next generation of targeted T-cells with chimeric antigen receptors for use in carcinomas
- An integrated microfluidic platform for the combining top-down and bottom-up biopharmaceuticals

Work progress:

- A two day- "National Symposium on Biological Therapeutics" was held on 10-11 March 2023 under the Chairmanship of the Director, NIPER Hajipur on the proposed CoE in Biological Therapeutics at NIPER-Hajipur
- The core team for the CoE in biological therapeutics from NIPER-Hajipur was formed with 11 heads. This includes, 1- Vector design, gene synthesis and cloning, 2- Cell line development and qualification, 3- Upstream processing, 4- Downstream processing, 5- Physicochemical characterization, 6-Release and stability testing, 7- In-vitro functional characterization, 8- Preclinical studies, 9- Clinical studies, 10- Quality assurance, and 11- Project management.
- The blockbuster drugs were finalized, starting with trastuzumab (Herceptin; patent expiration by 2019) against HER2, followed by pembrolizumab (Keytruda; patent expiration by 2028 (EU)/2036 (US)) against PD-L1.
- The protocols to conduct physicochemical and in-vitro functional characterization for trastuzumab was finalized, and appropriate indent was sent for approval

Future work:

- Physicochemical and in-vitro functional characterization platforms for trastuzumab will be established.
- An integrated team with involvement of clinicians, academia, and industry partner along with proper milestones needs to be identified.
- Facility and capability building needs to be executed (instrument, manpower, etc.)
- An appropriate program and data management facility is required.

- (i) **The Committee appreciate the efforts made.**
- (ii) **Further, the Chairman pointed out that for smooth functioning of the proposed Centre for Excellence a Nodal Office, Organogram and co-ordinators must be identified.**

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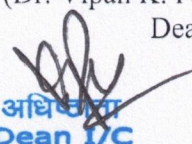
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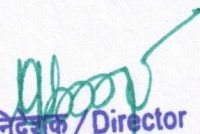
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	<p>(iii) Engineering experts from IIT Patna be involved to help.</p> <p>(iv) Dr. Pradeep Das highlighted that Confidentially of the programme be maintained properly.</p> <p>With these suggestions resolved to approved the proposed Centre for Excellence (CoE) in Biological Therapeutics</p>
Item No.06/4 th APDC/2023	Faculty Presentation (Pharmaceutics, Pharmaceutical Analysis, Biotechnology, Pharmacy Practice, Regulatory Toxicology, and Pharmacology & Toxicology)
Resolution	The Committee gone through the presentations made by each of the faculty members and emphasized that faculty members have done remarkable contribution in Academics and Research of institute in short span of time. Further, the Chairman highlight that some of the faculty member i.e. Dr. Krishna Murti should have focus and contribute on some identified area apart from the current ADR.
Concluding remarks of the Committee Members	<p>Dr. Om Kumar expressed his view that he is excited about the working on new formulation on Metformin by Dr. Rajkumar M. and Use of Aash Guard, Steam cell Podosite by Dr. Vipan Kumar Parihar.</p> <p>Dr. Satish Bhishe expressed that he is very happy on establishment of Centre for Excellence in Biotherapeutics</p> <p>The Chairman once again thanks to the Committee members for coming forward and offering their expert opinion for strengthening the research and academics of the Institute.</p>
The meeting concluded with vote of thanks to the Chair.	

(Dr. Vipan K. Parihar)
Dean(I/C)


अधिष्ठाता
Dean I/C

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निदेशक / Director
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