



# International Conference on Data-Processing and Networking (ICDPN-2024)

Date: 25th-26th October, 2024

ORGANISED BY: Institute of Technology and Business in České Budějovice,  
Near Prague, Czech Republic, Europe (Venue).

\*\*\*\*\* **CALL FOR PAPERS** \*\*\*\*\*

## **SPECIAL SESSION ON**

[AI/ML in LifeSciences/Pharmaceutical and Smart Health Care]

## **SESSION ORGANIZERS:**

[Mr Rohit Kumar Bondugula, University of Hyderabad, India, [rohitbond@uohyd.ac.in](mailto:rohitbond@uohyd.ac.in)]

## **EDITORIAL BOARD: (Optional)**

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## **SESSION DESCRIPTION:**

COVID-19 pandemic and its secondary complications created severe loss of lives, health and economy in several countries, significantly. Hence, it is an urgent need of this hour to find new drugs and suitable therapeutic solutions to battle the deadly viruses. Amongst computer-aided drug design strategies, recently Artificial Intelligence (AI) attracted the researchers and industrialists to speed up the new drug design and discovery. AI involves the use of systems and software to learn and interpret the input data so that proper conclusion will be attained for certain research objectives. AI applied to pharma industries under various sectors: drug design, repurposing, drug synthesis, product development, QC, pharmacokinetics, clinical trials, and market analysis to reduce the workload of manpower. This issue mainly focuses on addressing the significant applications of AI in all sectors of drug discovery starting from de novo drug design, target protein structure prediction/analysis and in the establishment of drug-protein interactions to improve physicochemical properties, consequently the pharmacological activity. Further, the use of AI in the design of the synthetic route, prediction of product yield, and deducing the reaction mechanism, formulations, preclinical and applicability clinical setup will also be addressed. Moreover, a healthy discussion on the limitations and future challenges in the applications of AI in pharma and biotech sectors will be

highly appreciated through your valuable contributions in the form of cutting-edge research papers, Review papers, and hypotheses.

#### RECOMMENDED TOPICS:

Topics to be discussed in this special session include (but are not limited to) the following:

All these potential applications around the use of Artificial Intelligence will be covered in this Special Issue, which welcomes the submission of both reviews and original research articles in this area, but not limited to the following research topics:

- **AI in Healthcare**
- **AI in Precision Medicine**
- **AI in Remote Patient Monitoring**
- **AI in Medical Imaging**
- **AI for early detection of Infectious Diseases**
- **AI in Genomics**
- **AI in Drug Design**
- **AI in Synthesis**
- **AI in Polypharmacology**
- **AI in Drug Repurposing AI in Drug Screening**
- **AI in preclinical studies AI in clinical trials**
- **AI in Drug store and Management**
- **AI in Patient care and drug monitoring**

#### SUBMISSION PROCEDURE:

Researchers and practitioners are invited to submit papers for this special theme session on **AI/ML in LifeSciences/Pharmaceutical and Smart Healthcare on or before [30th July 2024]**. All submissions must be original and may not be under review by another publication. INTERESTED AUTHORS SHOULD CONSULT THE CONFERENCE'S GUIDELINES FOR MANUSCRIPT SUBMISSIONS at **<https://www.icdpn-conf.com/Downloads>**. All submitted papers will be reviewed on a double-blind, peer review basis.

**NOTE:** While submitting paper in this special session, please specify **[AI/ML in Life/Pharmaceutical and Health Care]** at the top (**above paper title**) of the first page of your paper.

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