



MEMORANDUM OF UNDERSTANDING (MoU)

This Memorandum of Understanding (MoU) is executed at Srinagar on this 01 day of March 2023, "(hereinafter referred to as the Effective Date)"

Between

National Institute of Technology Srinagar, a Centrally Funded Technical Institute, established under National Institutes of Technology Act, 2007, having Educational Campus & Administrative Offices at Hazratbal, Srinagar, J&K-190006 (hereinafter referred to as the **NIT Srinagar** & acting through its **Director** as its "Signing Authority", which expression shall, unless excluded by or repugnant to the context be deemed include its successors-in-interest and assigns) of the FIRST PART.

And

S.A.P. Automations India Pvt. Ltd., New Delhi, an Indian company and having its registered office at FF17/367, Laxmi Nagar, Delhi-110092, INDIA, (hereinafter for the sake of brevity referred to as "**S.A.P.**", which expression shall, unless repugnant to the context or meaning thereof, be deemed to mean and include its successors-in-business and permitted assigns) of the SECOND PART,

NIT Srinagar and **S.A.P** are hereinafter individually referred to as "Party" and collectively as "Parties",

PREAMBLE

WHEREAS, NIT Srinagar is engaged in education research, design, development and consultancy in the field of Engineering, Technology, Material Science, Architecture & Planning and Efficiency of Building. NIT Srinagar has expressed the desire of generating, cultivating and promoting building science and technology in the service of the region.

Among the leading new technologies used in the world for innovative heating and cooling solutions, to reduce the energy consumption, lowering of emissions and carbon, NIT Srinagar wishes to be involved in R&D in the area of "Geothermal & Aerothermal Cooling and Heating" is under ICAP (India Cooling Action Plan) of the Govt. of India. This is focussed at decarbonising the heating and cooling operations, with focussed initiatives for climate change mitigation and net zero buildings.

WHEREAS, S.A.P. Automations a pioneer in India for Geothermal & Aerothermal Space conditioning, is specialized in Aerothermal and Geothermal Heating & Cooling and for hybridization of Ultra Low Energy Buildings combining with Geothermal or Aerothermal space conditioning, and solar as primary RE supply, provides solutions. S.A.P. has developed projects in design and built mode in various countries.

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ARTICLE – I: Scope of the MoU

This MoU details the modalities and general conditions regarding collaboration between NIT Srinagar and S.A.P. for enhancing within the country, the R&D in the area hybridization of Ultra Low Energy Buildings combining with geothermal or Aerothermal space conditioning, and solar without any prejudice to prevailing rules and regulations in NIT Srinagar and S.A.P. without any disregard to any mechanism evolved and approved by the competent authorities under Government of India in so far the areas of cooperation may be extended through mutual consent.

WHEREAS, both NIT Srinagar and S.A.P. Automations now,

- Recognize the importance of R&D in the area of Geothermal Heating & Cooling.
- Desire to collaborate to study, review and advice upon the design and development of hybridization of Ultra Low Energy Buildings combining with Geothermal or Aerothermal space conditioning, and coupled solar photo-voltaic (PV) as primary renewable energy (RE), in an effort to correctly implement the technology in the country.
- To work together and learn ways of implementation of the Geothermal Technology whose experience shall be used by both the partners through research findings on to the reduction of energy consumption, reduction of carbon and emission, and reduction of refrigerant use in space conditioning, completely in line with ICAP.

ARTICLE – II: Scope of the Industry Interaction

Exchange of knowledge / exchange of know how process / Technology transfer / teachers students scientists / staff

Both NIT Srinagar and S.A.P. Automations agree to hold/conduct, whenever feasible, joint technology development/knowledge sharing / training / organization of visits within the areas of cooperation.

ARTICLE – III: Sharing of Facilities/ Know-How/Trainings/Use of Design Methods

Both NIT Srinagar and S.A.P. agree to share their respective facilities, resources and manpower. Training, project site visits in order to promote industry and research interaction along with actual site experience in the areas of cooperation.

Permission for such arrangement must to sought in writing by the availing party and should not be deemed as granted if not communicated in writing.

ARTICLE – IV: Coordination of the program

The areas of cooperation under this MoU will be approved by the **Coordination Committee** set up for the purpose.

Research and education in the above-mentioned areas, NIT Srinagar and S.A.P. Automations will work together to identify best research projects of mutual interest that could be financed

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from R&D funding agencies or Government from other agencies under their respective CSR programmes.

S.A.P. Automations with their capability to design and integrate would contribute their design and engineering services of similar kind of initiatives as a part of research and development projects.

ARTICLE-V: Coordination and Communication:

Coordination and official communication will be channeled through the following officials / offices:

S.A.P. Automations:

Mr. Arijit Ghosh

Managing Director

S.A.P. Automations India Pvt. Ltd.,

New Delhi

+91 9971 600 708 (M)

arijit@sapautomation.in

NIT Srinagar:

Prof. (Dr.) Rakesh Sehgal

Director

NIT Srinagar, J&K

director@nitsri.ac.in

Coordinators for NIT Srinagar:

Dr. Abhijit Dey

Assistant Professor

Mechanical Engineering Department

abhijitdey@nitsri.ac.in

Dr. Asadur Rahman

Assistant Professor

Electrical Engineering Department

asadur@nitsri.ac.in

ARTICLE-VI: Objectives of Collaboration

The objectives of the collaboration is to work and educate the students in the following

1. Design Building Physics as per Climatic Conditions
2. Use of Decarbonized heat exchange for Space Conditioning
3. Hybridization of Renewable Electricity and Renewable Heat

on the way to NET ZERO for buildings.

ARTICLE-VII: Training Objectives for Students:

1. Site visit and industrial training (time duration to be decided by NIT Srinagar) - S.A.P. Automation will explore the possibility of cost cover of travel and lodging of the students as required by the exigency of the project. It will be explored by S.A.P. Automations and NIT Srinagar to make student pool selection.
2. Opportunity for students to be absorbed in actual jobs, if found suitable - To be discussed with NIT Srinagar before communicating with the students.

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All communication in this regard shall be carried out through the coordinators of NIT Srinagar and will be organized by S.A.P. Automations.

ARTICLE-VIII: Design Validation / Consultancy Opportunity:

S.A.P. Automations will train the team of NIT Srinagar to take design validation jobs as an avenue of consultancy. This will allow more exposure and experience and therefore more application-based experience in understanding NET ZERO quantification, this jobs are paid based on Govt. norms and are desired by Govt. projects. The client will pay NIT Srinagar directly and S.A.P. Automations will not be a party to it. NIT Srinagar shall strive to emerge as a Design Validation Centre for NET ZERO. S.A.P. Automations will not put forward any claim, whatsoever, from this amount and it will be dedicated to research and students.

ARTICLE - IX: Financial Obligation

This Memorandum of Understanding will not give rise to any financial obligation by one institution to the other. Each institution will bear its own cost and expenses in relation to the activities under this Memorandum of Understanding. There shall be no financial commitment on the part of both the parties.

In case there arises any financial consideration, it will be dealt separately as per respective regulatory norms.

No per diem amount or consultancy will be charged by S.A.P. Automations as an endeavor to educate students/train faculty in the field of low energy building leading to NET ZERO.

ARTICLE - X: IPR

The Intellectual Property Rights (IPR), royalty, ownership of design/products developed/publications, patents etc. under the scope of this MoU, shall be held jointly. The specific deviation, if any, shall be mutually agreed as a special case. This excludes any commercial projects done individual by either party in their own capacity as solution providers.

Nothing contained in this MoU shall, by express grant, implication, estoppel or otherwise, create in either Party any right, title, interest, or license in or to the intellectual property (including but not limited to know-how, inventions, patents, copy rights and designs) of the other Party.

However, Intellectual Property Rights (IPR)/ Patents flowing out of the work undertaken vide this MoU will be governed by applicable laws related to inventors' hip and ownership.

Provided, the protection of intellectual property rights shall be enforced in conformity with the national laws, rules and regulations of the Institutions and with other international agreements signed by the government or the authorized organization in the Institutions' country.

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ARTICLE – XI: Effective Date and Duration of MoU

- a) The MoU shall be effective from the date of signing.
- b) The duration of the MoU shall be for a period of **three years** from the effective date. May be extended on mutual consent.
- c) During its tenancy, the MoU may be extended or terminated by a prior notice of not less than one month by either party. However, termination of the MoU will not, in any manner, affect the progress of any ongoing R&D activity that has been initiated formally with approval of both the parties.
- d) Any clause or article of the MoU may be modified or amended by mutual Agreement of NIT Srinagar and S.A.P. Automations

ARTICLE – XII: Arbitration

In the event of a dispute, controversy or claim arising out of or relating to This Memorandum of Understanding, or the breach, termination or invalidity thereof, the Parties will use their best efforts to settle promptly such dispute through direct negotiation. Any dispute that is not settled within sixty (60) days from the date either Party has notified the other Party of the nature of the dispute and of the measures that should be taken to rectify it will be resolved through consultation between the Director of NIT or duly authorized representative of the Institute and the [TITLE OF EXECUTIVE HEAD] of S.A.P. Automations India Pvt. Ltd., or their duly authorized representatives. Each Party will give full and sympathetic consideration to any proposal advanced by the other to settle amicably any matter for which no provision has been made or any controversy as to the interpretation or application of this MOU.

Provided if both or any of the parties fail to agree with the settlement resulting from the above-mentioned consultation procedure, then the parties are free to resolve their dispute through mediation, as statutorily recognized under Section-89 of Civil Procedural Code, 1908.

ARTICLE-XIII: Confidentiality

During the tenure of the MoU, both NIT Srinagar and S.A.P. Automations will maintain strict confidentiality and prevent disclosure of all the information and data exchanged under the scope of this MoU for any purpose other than in accordance with the MoU unless such disclosure is required to be done under the binding laws, regulations or governmental orders; provided that in such case, the party required to disclose, shall give sufficient prior written notice to the other party.

ARTICLE-XIV: Severability

The construction, interpretation and enforcement of this MoU shall be governed by the present judicial laws available. Should any portion of this MoU be judicially determined to be illegal or unenforceable, the remainder of the MoU shall continue in full force and effect, and either party may re-negotiate the terms affected by the severance

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In witness whereof, the parties here to have, entered into this agreement, effective as on the day, month and year herein above written in the presence of the following officials:
For S.A.P. Automations (India) Pvt. Ltd.

1.3.23
[Signature] Director
Mr. Arijit Ghosh
Managing Director
S.A.P. Automations India Pvt. Ltd.,
New Delhi

01/03/23
[Signature]
Prof. (Dr.) Rakesh Sehgal
Director
NIT Srinagar, J&K

निदेशक
राष्ट्रीय प्रौद्योगिकी संस्थान श्रीनगर
हजरतबल-१९०००६, जम्मू और कश्मीर, भारत
DIRECTOR
National Institute of Technology Srinagar
Hazratbal-190006, J&K, India

Witnesses:

Signature

Signature

Name:

Name:

Designation:

Designation:

Signature

Signature

Name:

Name:

Designation:

Designation:

[Signature]
Prof. G. A. Harman
[Signature]
01/03/2023
(Prof. Shameem Ahmed Lodhi)

For S.A.P. Automations (India) Pvt. Ltd. Organizational Representatives:

1.3.23
[Signature] Director
Mr. Arijit Ghosh
S.A.P. Automations India Pvt. Ltd.,
New Delhi

01/03/23
[Signature]
Dr. Asadur Rahman
Assistant Professor, EED, NIT Srinagar, J&K

01/03/23
[Signature]
Dr. Abhijit Dey
Assistant Professor, MED, NIT Srinagar, J&K