

CVD Lab (PMS) Micro Processor Controlled Furnace

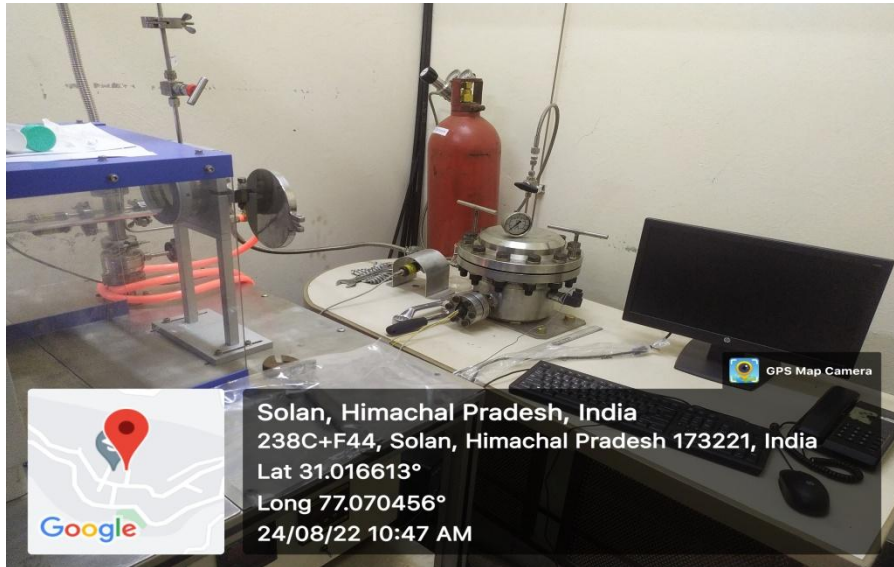


Spin Oriented Thin Film Formation System



CVD furnace (2-D Lab)

CVD furnace (2-D Lab)



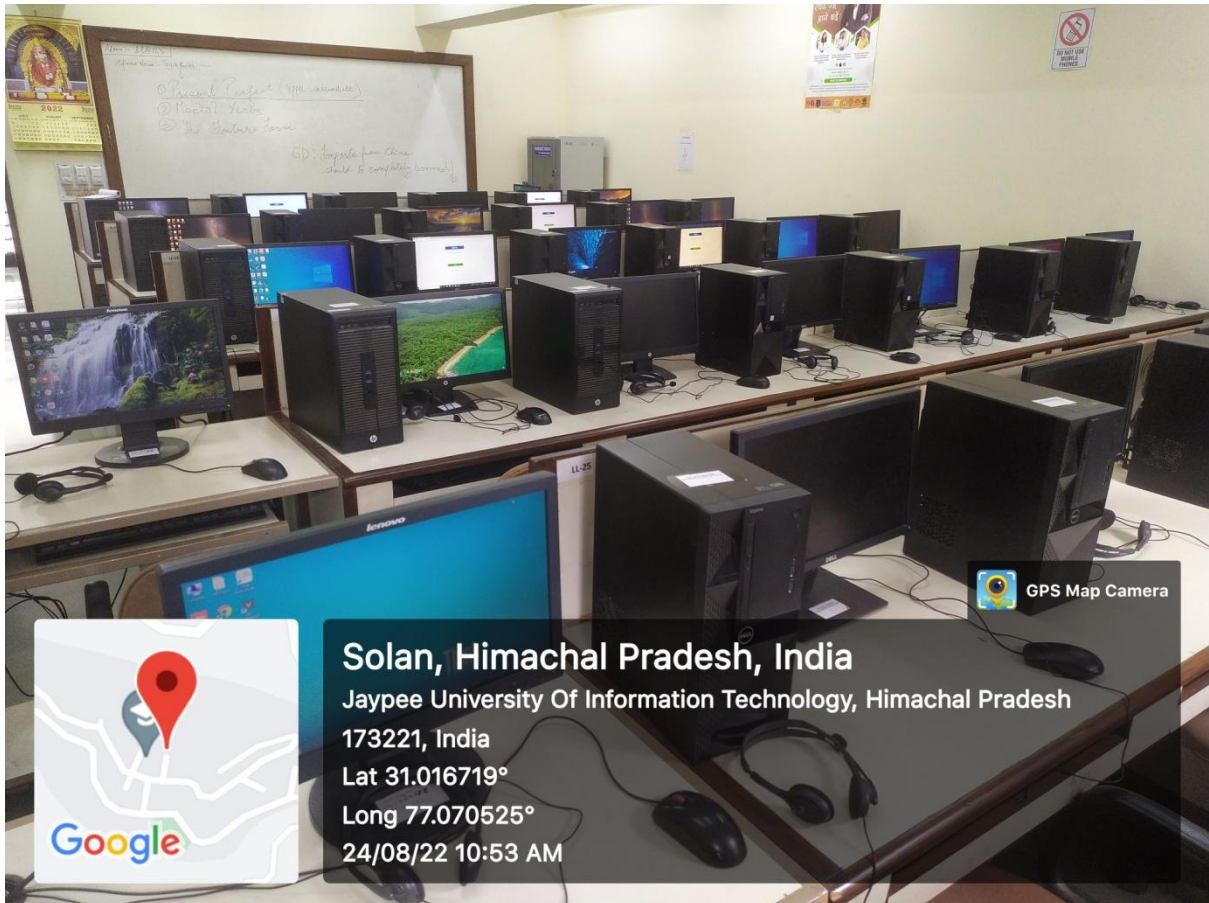
Vacuum Coating Unit (material Science Lab)



Electron Beam Gun Power Supply



Language Lab



Communication System Lab (Robot)




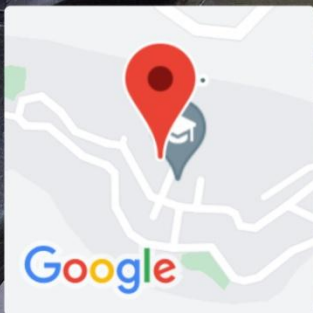
Analog and Digital Signal converter



Imaging Microscope



 GPS Map Camera

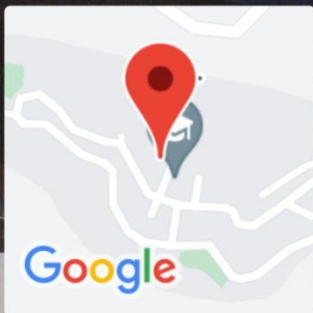


Solan, Himachal Pradesh, India
2389+JX6, Himachal Pradesh 173221, India
Lat 31.016873°
Long 77.06989°
24/08/22 11:04 AM

Gen Gun (High End Instrumentation Facility Lab) Bio Lab

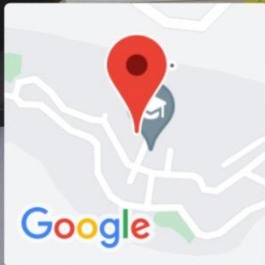


Genetic Analyzer



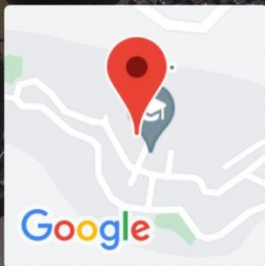
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2389+JX6, Himachal Pradesh 173221, India
Lat 31.016854°
Long 77.069926°
24/08/22 11:05 AM

Preparative HPLC



Solan, Himachal Pradesh, India
2389+JX6, Himachal Pradesh 173221, India
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Long 77.069905°
24/08/22 11:05 AM

Anlytical HPLC



Solan, Himachal Pradesh, India
2389+JX6, Himachal Pradesh 173221, India
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Long 77.069903°
24/08/22 11:06 AM

Mass Spectrophotometer



Gas Chromatography lab



Atomic Absorption Spectroscopy

A total of 393 proteins were extracted from text mining as well as STRING approach. On comparison, 19 proteins were found common in both approaches.

Proteins associated with biofilms in *A. baumannii*:

- > adcA, adcB, Adel, Adel and AdeK
- > Csu A/B/C/D/E
- > fimbrial protein
- > P pilus assembly
- > Outer membrane protein A
- > Ton B
- > ...

Text mining: Total no of proteins=121

STRING: Total no of proteins=202

Conclusion

1. Potential interaction networks between biofilm proteins and resistance ones were predicted, which might aggravate biofilm formation and will obscure biofilm eradication.
2. These proteins are proposed as potential drug targets to combat multitude of resistance conferred by biofilm phenotype in *A. baumannii* strains.

Acknowledgement

Financial assistance from SERB, India is duly acknowledged.
Ms. Monika wishes to thank to JUIT for providing Ph.D. fellowship.

PEPTIDE LAB
LAB SUPERVISOR
Dr. JITENDRA VASHIST

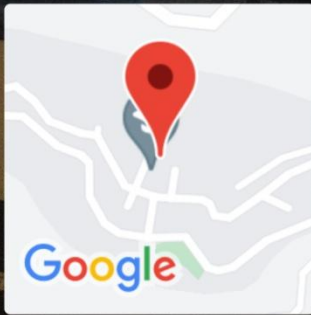
Ph.D. STUDENTS
NUTAN
MONIKA CHOUDHARY

RESEARCH STUDENT
KATASHA THAKUR

RESEARCH STUDENT
SHIVANGI KAPOOR

UPS

GPS Map Camera



Solan, Himachal Pradesh, India
H-9 12, JUIT-Waknaghat Rd, Himachal Pradesh 173221,
India
Lat 31.016766°
Long 77.070285°
24/08/22 11:19 AM

Plant Growth Chamber



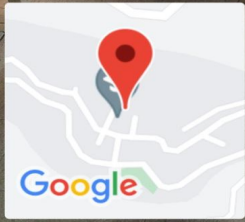
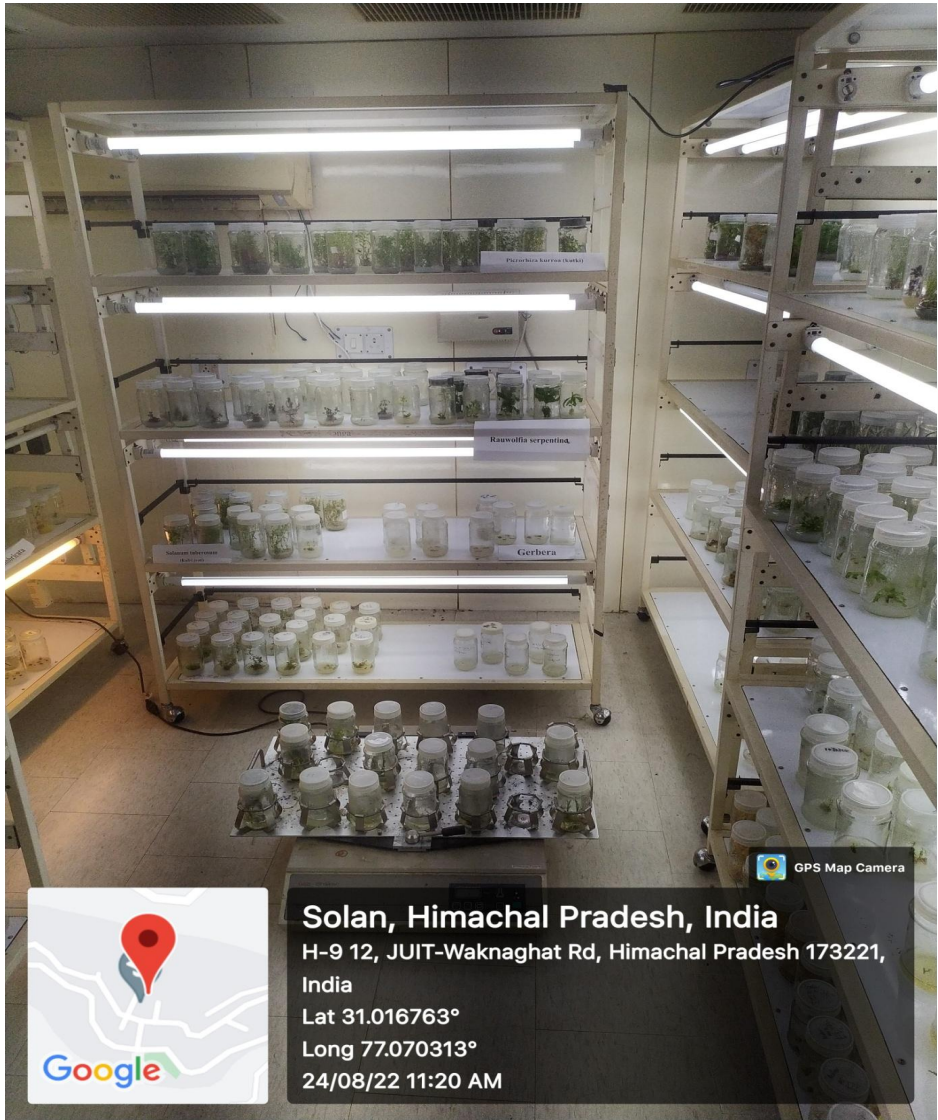
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Solan, Himachal Pradesh, India

H-9 12, JUIT-Waknaghat Rd, Himachal Pradesh 173221,
India

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GPS Map Camera



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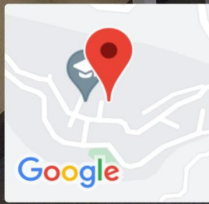
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PCR Work Station



LP Logic System



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Jaypee University Of Information Technology, Himachal Pradesh 173221, India
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GPS Map Camera

Bio Safety Level-II



Fermenter




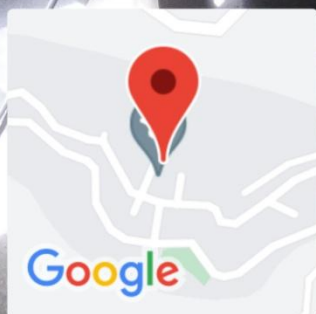
Spray Drier



Lyophilizer



 GPS Map Camera



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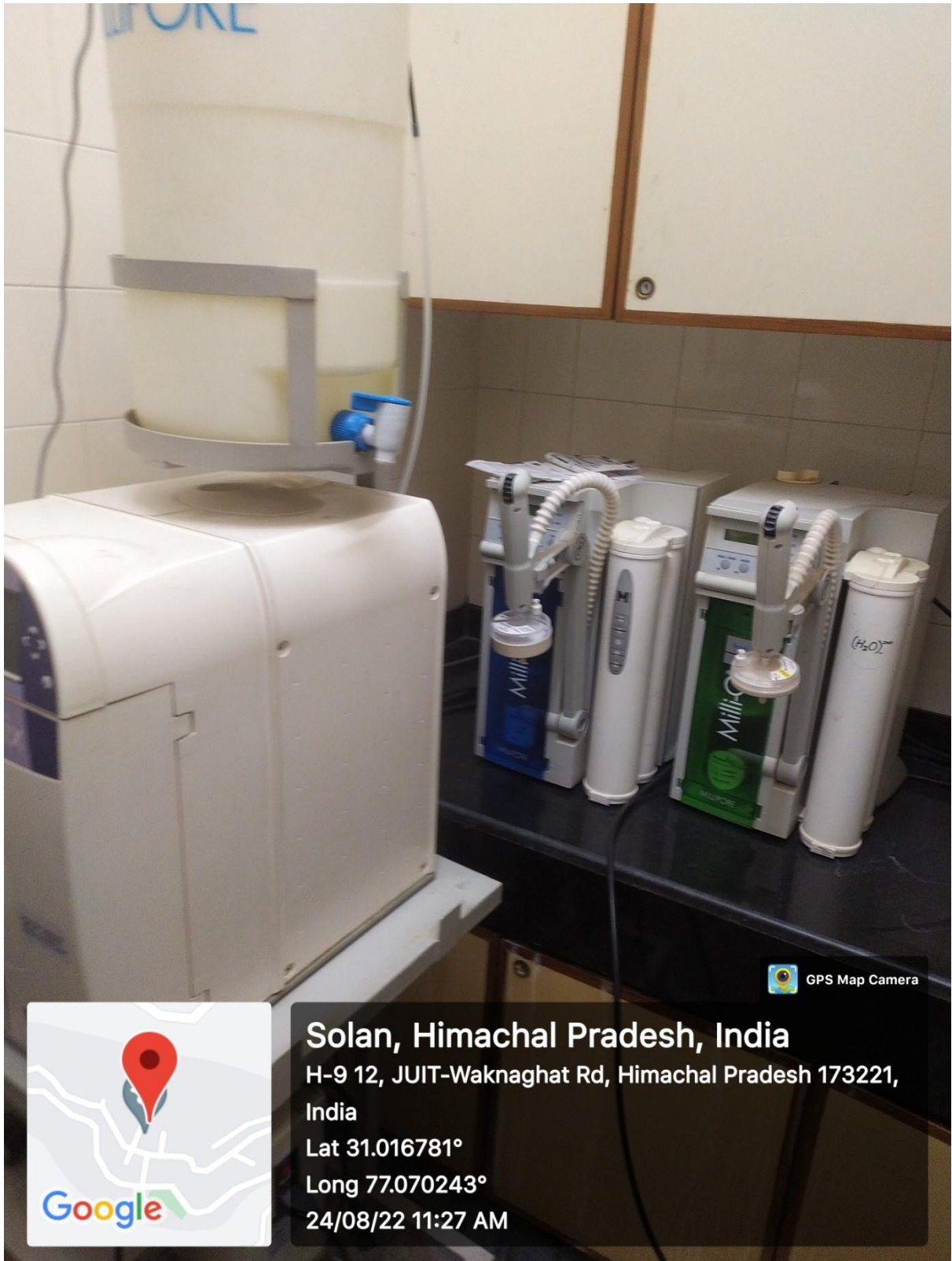
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India

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Water Elys



Incubator Shaker



Gel Doc



Solan, Himachal Pradesh, India

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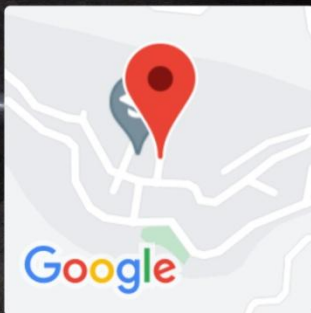
Ultra Centrifuge



RTPCR



 GPS Map Camera



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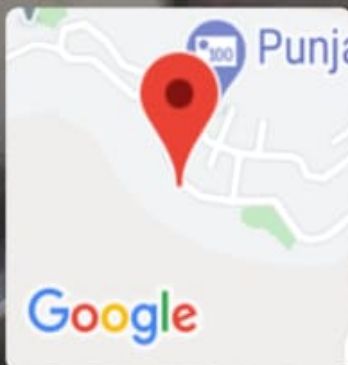
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COMPACTION FACTOR TEST APPARATUS



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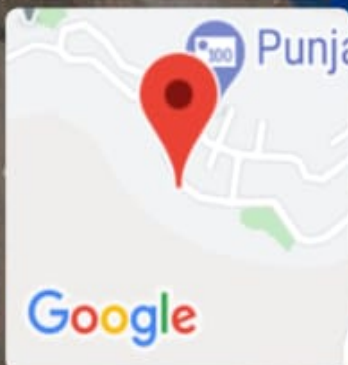
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Himachal Pradesh 173221, India

Lat N 31° 0' 57.1752"

Long E 77° 4' 9.786"

09/11/20 03:40 PM

COMPRESSION TESTING MACHINE (CTM 1000kN)



Waknaghat, Himachal Pradesh, India

Civil Engineering Department , JUIT-Waknaghat , Waknaghat,
Himachal Pradesh 173221, India

Lat N 31° 0' 57.1752"

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DIGITAL COMPRESSION TESTING MACHINE (CTM 2000kN)



Wagnaghat, Himachal Pradesh, India

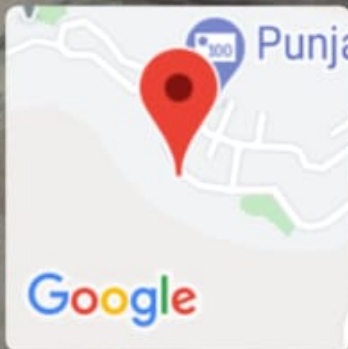
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FLEXURAL TESTING TESTING MACHINE



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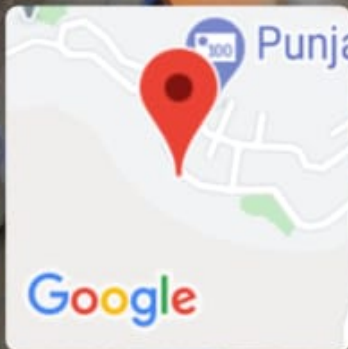
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Himachal Pradesh 173221, India

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HOBART MIXTURE



Wagnaghat, Himachal Pradesh, India

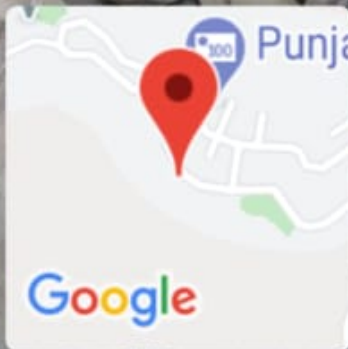
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LE-CHATelier WATER BATH



Waknaghat, Himachal Pradesh, India

Civil Engineering Department , JUIT-Waknaghat , Waknaghat,
Himachal Pradesh 173221, India

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Long E 77° 4' 9.786"

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PAN MIXTURE



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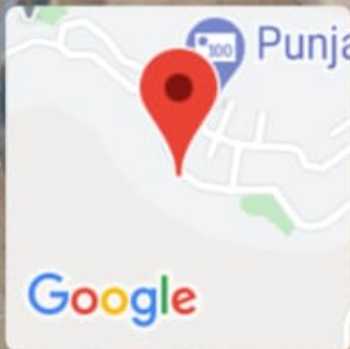
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Himachal Pradesh 173221, India

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SLUMP CONE TEST APPARATUS



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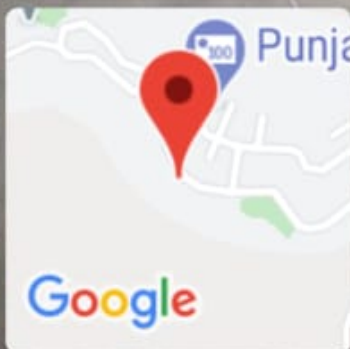
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TENSILE TESTING OF CEMENT APPARATUS



Wagnaghat, Himachal Pradesh, India

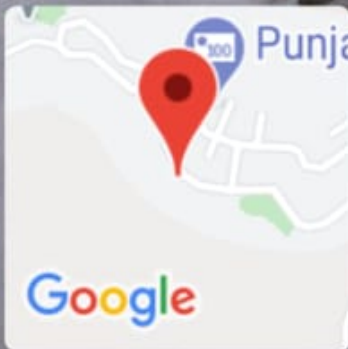
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UNIVERSAL TESTING MACHINE



Wagnaghat, Himachal Pradesh, India

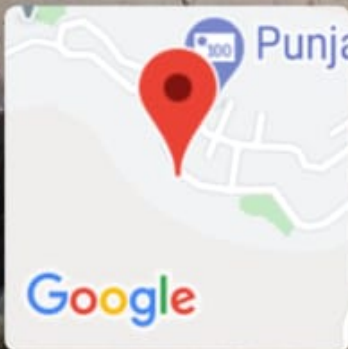
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Lat N 31° 0' 57.1752"

Long E 77° 4' 9.786"

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VIBERATION TABLE



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Civil Engineering Department , JUIT-Wagnaghat , Wagnaghat,
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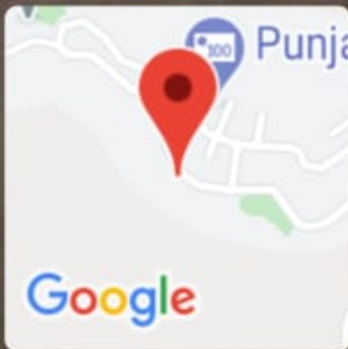
VIBRATORY SEIVE SHAKER

mass of ball + cement + kerosene = 114.5 g

$$\text{Sp. gr. of Kerosene} - S = \frac{W_3 - W_1}{W_2 - W_1} = \frac{345}{555} = 0.62$$
$$\text{Sp. gr. of cement} - S = \frac{W_5 (W_3 - W_1)}{(W_5 + W_3 - W_4) (W_2 - W_1)}$$

2.22

$$\frac{40 (345)}{(44.53 + 114.5 - 85) \times 555} = \frac{380}{171.75} = 2.22$$



Wagnaghat, Himachal Pradesh, India

Civil Engineering Department, JUIT-Wagnaghat, Wagnaghat,
Himachal Pradesh 173221, India

Lat N 31° 0' 57.1752"

Long E 77° 4' 9.786"

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CAD LAB



Solan, Himachal Pradesh, India

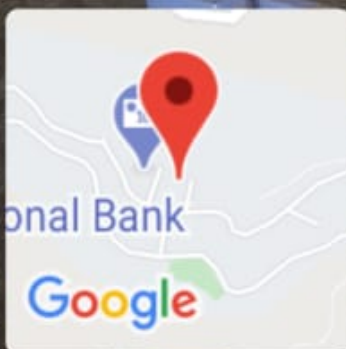
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Long E 77° 4' 13.296"

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UNIVERSIAL TESTING MACHING



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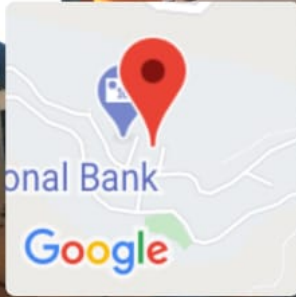
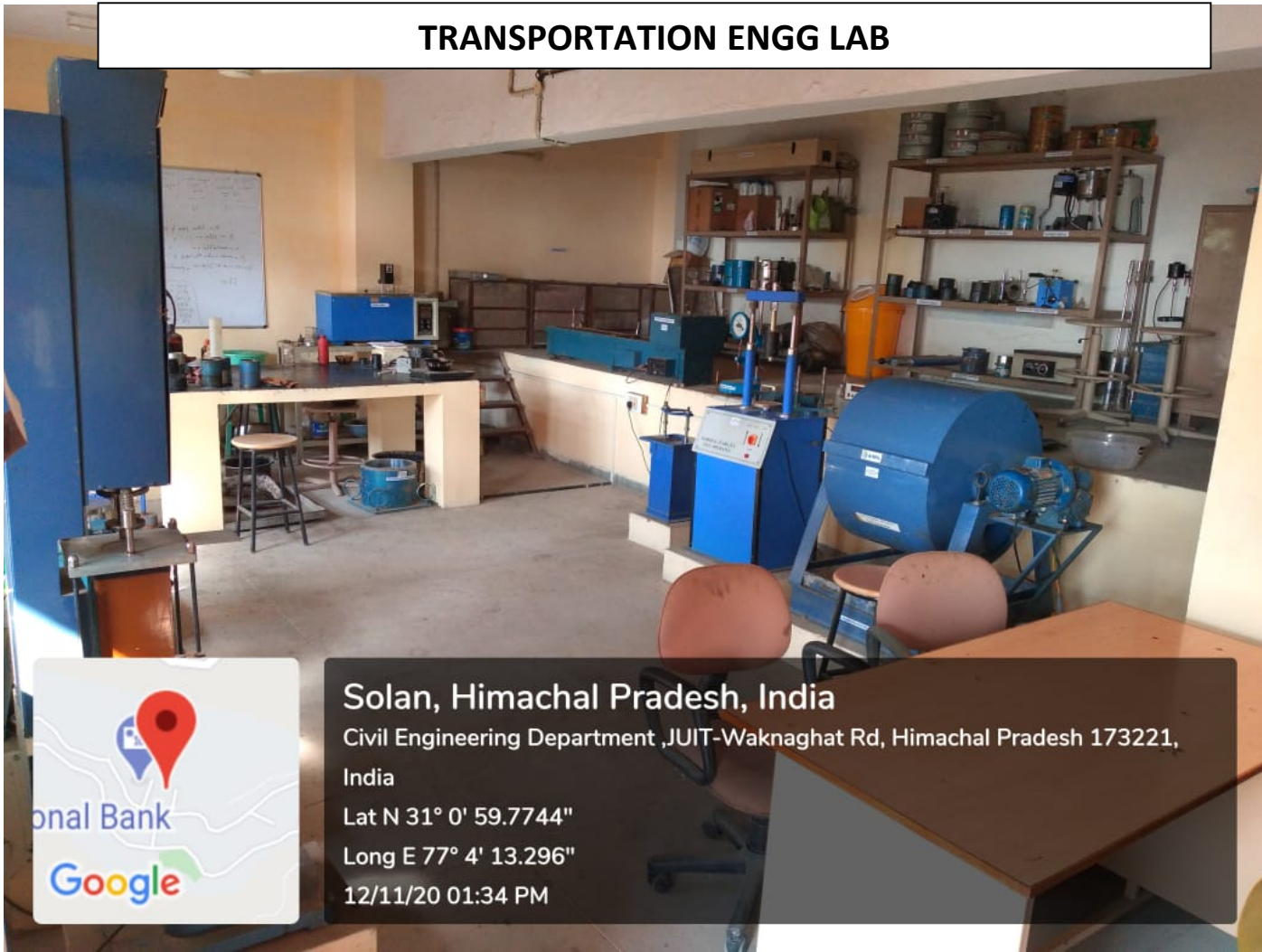
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TRANSPORTATION ENGG LAB



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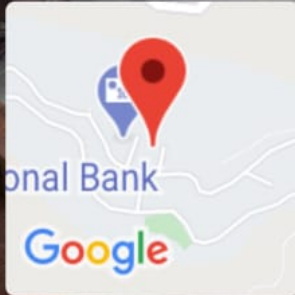
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FLUID MECHANICS LAB



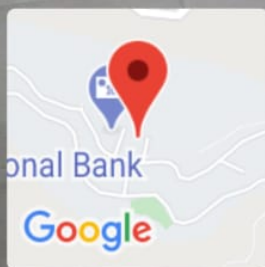
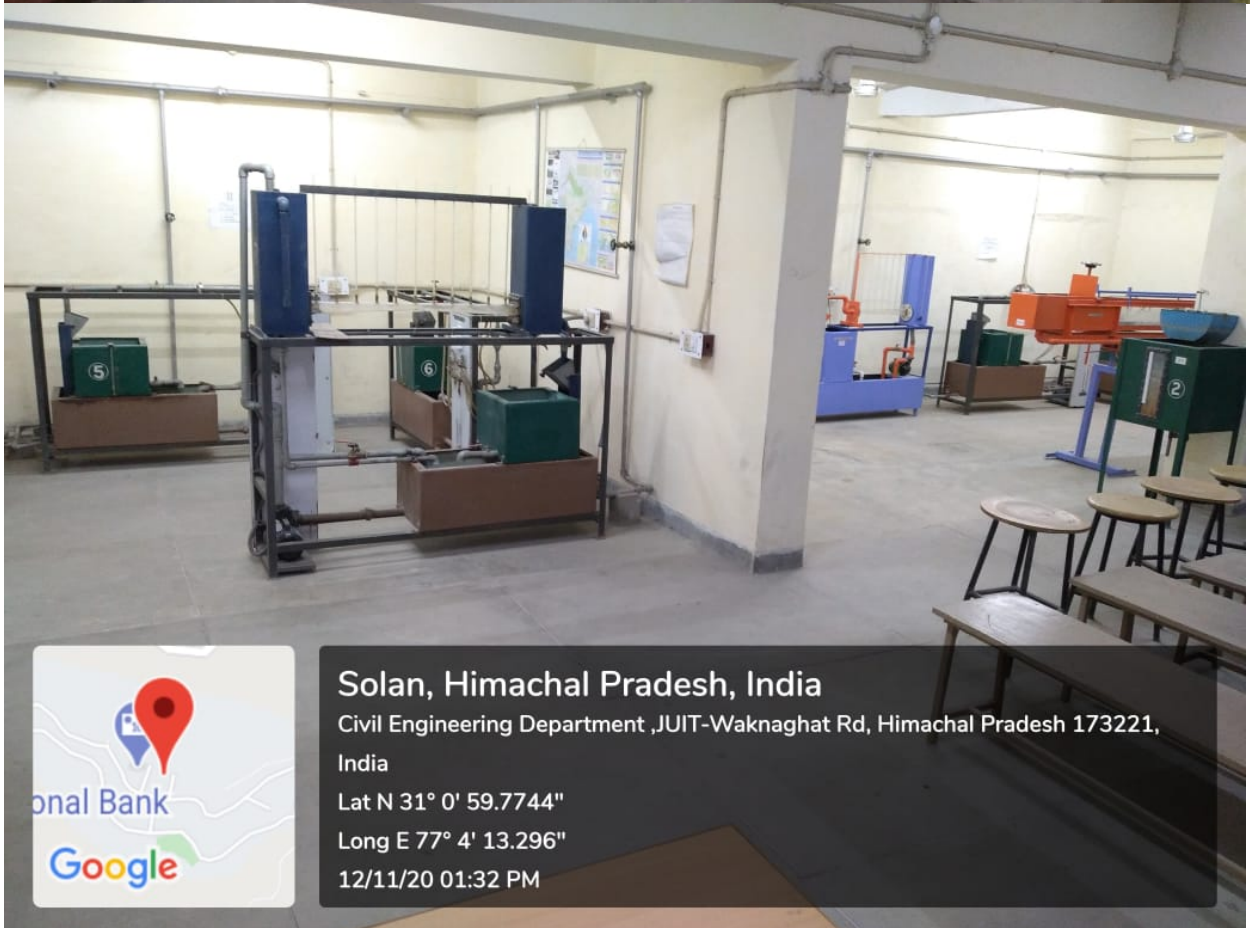
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Civil Engineering Department ,JUIT-Waknaghat Rd, Himachal Pradesh 173221,
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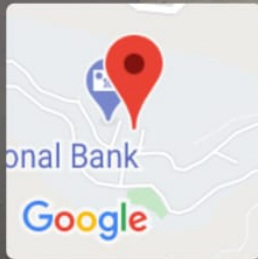
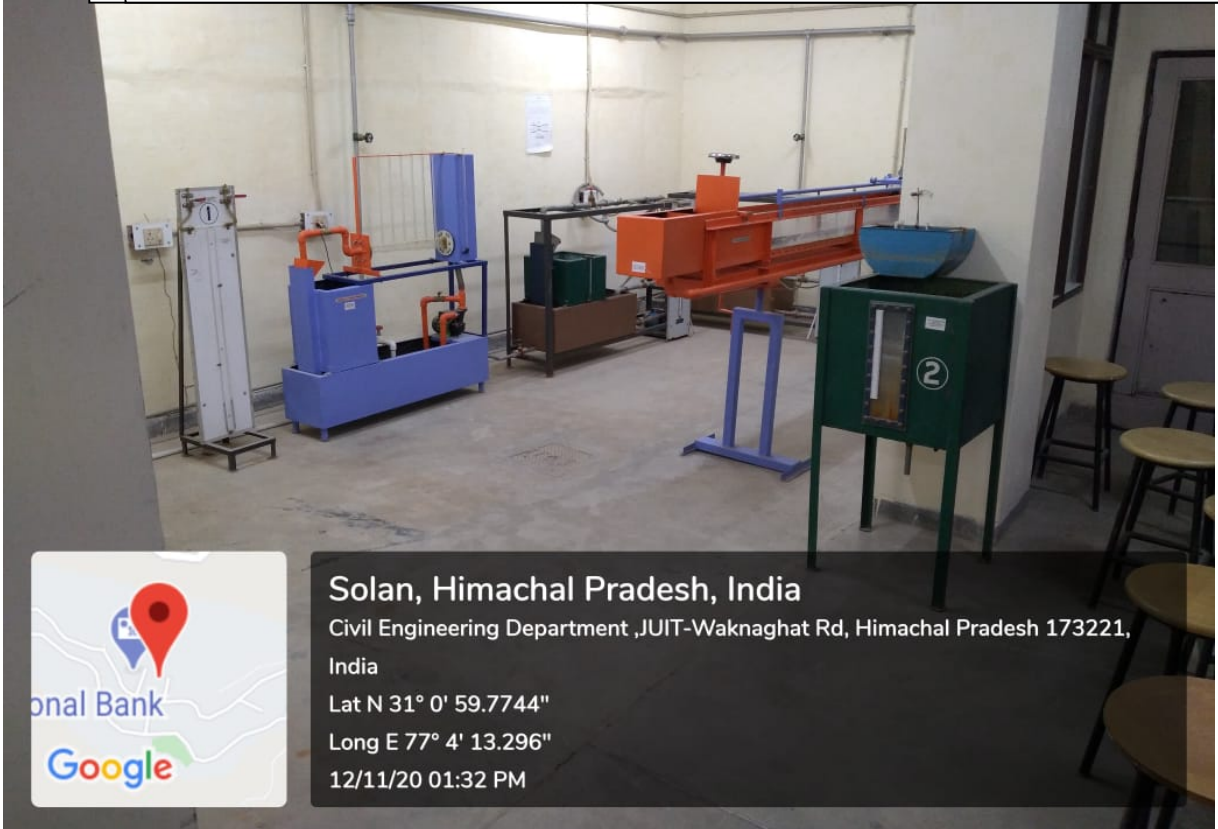
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FLUID MECHANICS LAB



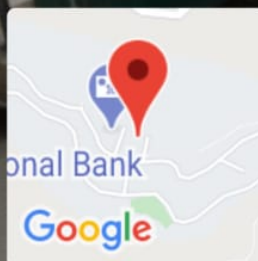
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Civil Engineering Department ,JUIT-Waknaghat Rd, Himachal Pradesh 173221,
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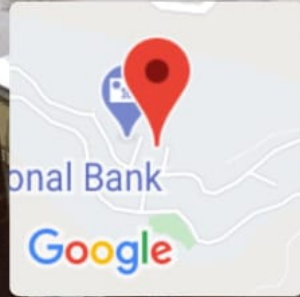
Civil Engineering Department ,JUIT-Waknaghat Rd, Himachal Pradesh 173221,
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CONCRETE LAB-I



Solan, Himachal Pradesh, India

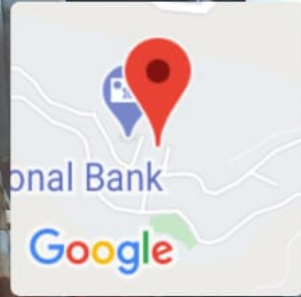
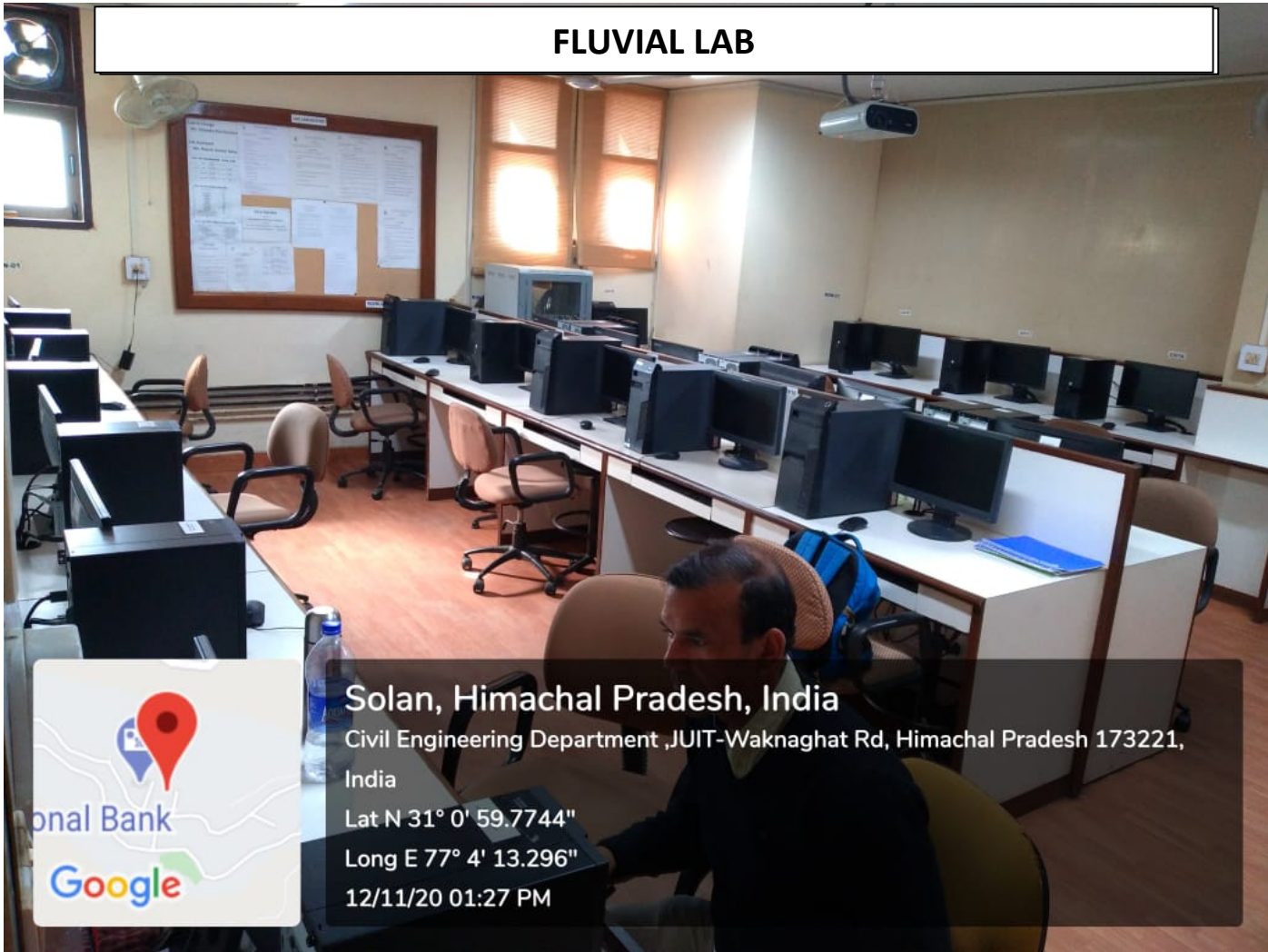
Civil Engineering Department, JUIT-Walnaghat Rd, Himachal Pradesh 173221,
India

Lat N 31° 0' 59.7744"

Long E 77° 4' 13.296"

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FLUVIAL LAB



Solan, Himachal Pradesh, India

Civil Engineering Department, JUIT-Waknaghat Rd, Himachal Pradesh 173221,
India

Lat N 31° 0' 59.7744"

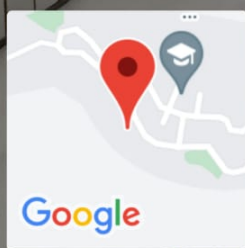
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ENVIRONMENTAL ENGINEERING & CHEMISTRY LAB



ENVIRONMENTAL ENGINEERING & CHEMISTRY LAB

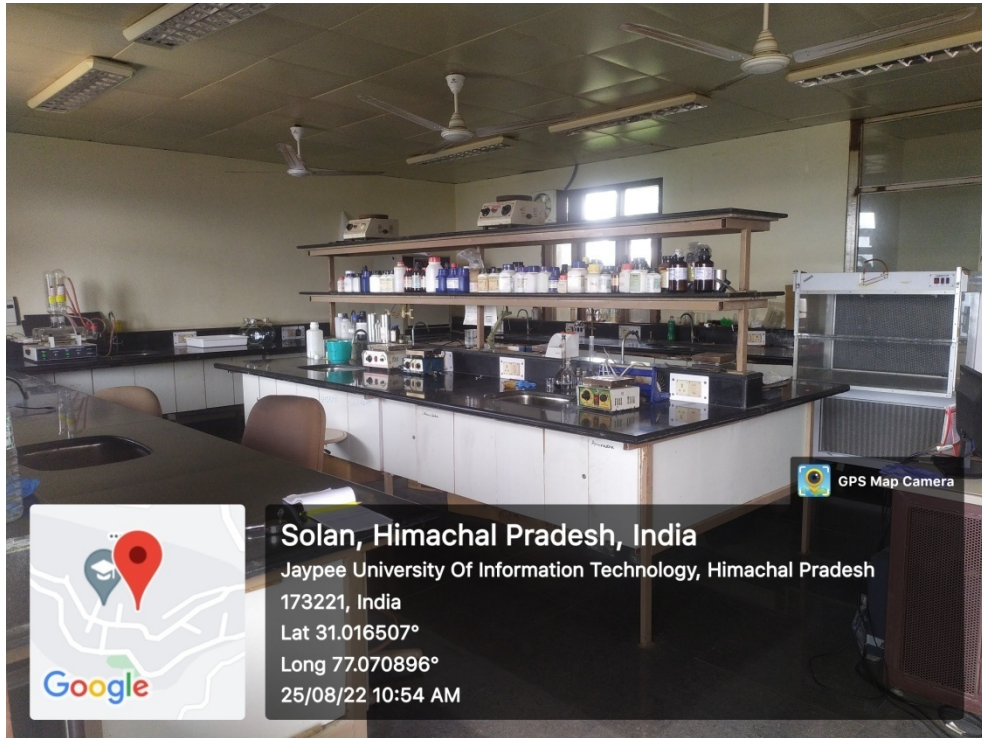


Solan, Himachal Pradesh, India
2389+9MJ, Himachal Pradesh 173221, India
Lat 31.016014°
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25/08/22 02:09 PM

1476.9 m

GPS Map Camera

CHEMICAL WORK BENCH



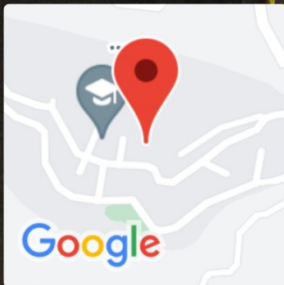
HOT AIR OVEN



HOT AIR OVEN



HORIZONTAL MUFFLE FURNACE



Solan, Himachal Pradesh, India

Jaypee University Of Information Technology, Himachal Pradesh 173221, India

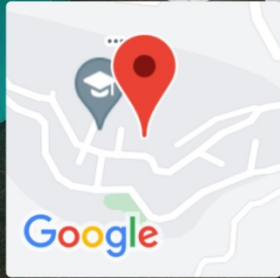
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GPS Map Camera

LAMINAR FLOW



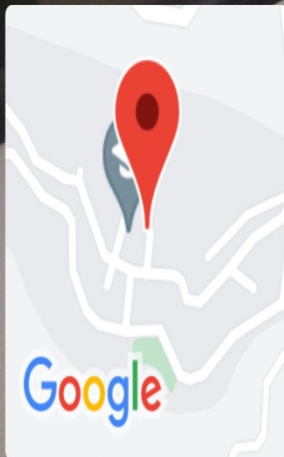
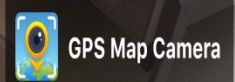
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Jaypee University Of Information Technology, Himachal Pradesh 173221, India
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Long 77.070914°
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GPS Map Camera

CHEMICAL WORK BENCH



GAS SENSOR SET UP

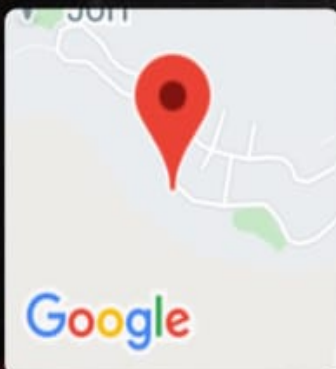


Solan, Himachal Pradesh, India
238C+F44, Solan, Himachal Pradesh 173221, India
Lat 31.016617°
Long 77.070456°
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UV-VIS-NIR SPECTROPHOTOMETER



SPECTROPHOTOMETER



Waknaghat, Himachal Pradesh, India

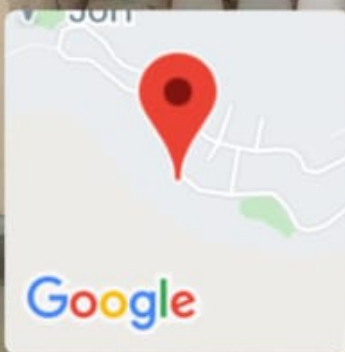
Civil Engineering Department , JUIT-Waknaghat , Waknaghat,
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KJEITRON



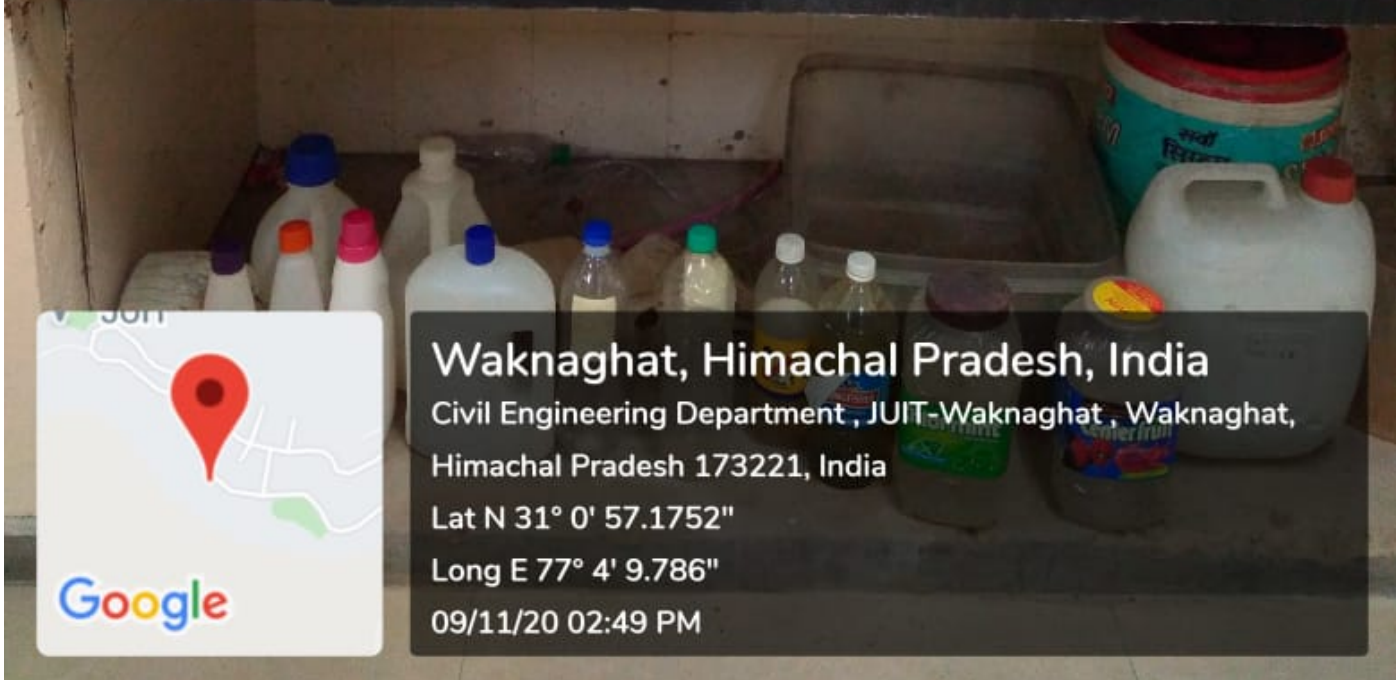
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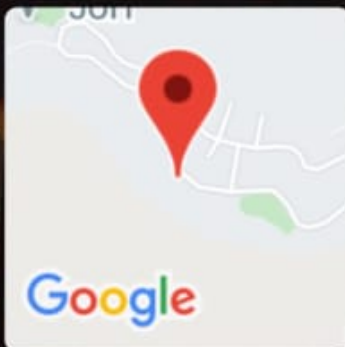
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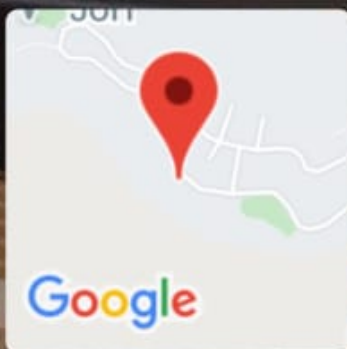


JAR TEST APPARATUS



Waknaghat, Himachal Pradesh, India
Civil Engineering Department , JUIT-Waknaghat , Waknaghat,
Himachal Pradesh 173221, India
Lat N 31° 0' 57.1752"
Long E 77° 4' 9.786"
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RESPIRABLE DUST SAMPLER



Waknaghat, Himachal Pradesh, India

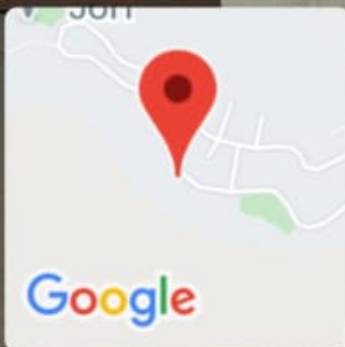
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Long E 77° 4' 9.786"

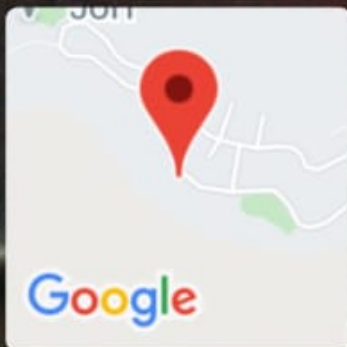
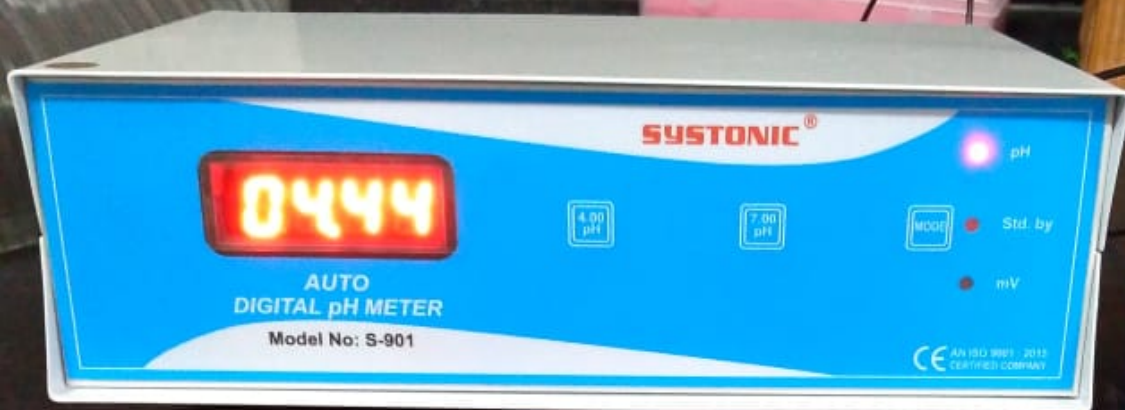
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DUBLE DISTILLATION UNIT



Waknaghat, Himachal Pradesh, India
Civil Engineering Department , JUIT-Waknaghat , Waknaghat,
Himachal Pradesh 173221, India
Lat N 31° 0' 57.1752"
Long E 77° 4' 9.786"
09/11/20 02:49 PM

pH METER



Waknaghat, Himachal Pradesh, India

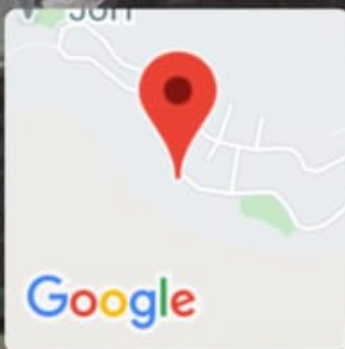
Civil Engineering Department , JUIT-Waknaghat , Waknaghat,
Himachal Pradesh 173221, India

Lat N 31° 0' 57.1752"

Long E 77° 4' 9.786"

09/11/20 02:56 PM

CONDUCTIVITY METER



Waknaghat, Himachal Pradesh, India

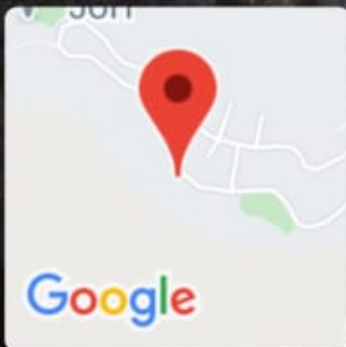
Civil Engineering Department , JUIT-Waknaghat , Waknaghat,
Himachal Pradesh 173221, India

Lat N 31° 0' 57.1752"

Long E 77° 4' 9.786"

09/11/20 02:58 PM

COD REACTOR



Waknaghat, Himachal Pradesh, India

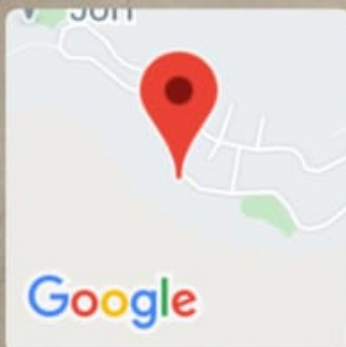
Civil Engineering Department , JUIT-Waknaghat , Waknaghat,
Himachal Pradesh 173221, India

Lat N 31° 0' 57.1752"

Long E 77° 4' 9.786"

09/11/20 02:57 PM

BOD INCUBATOR



Waknaghat, Himachal Pradesh, India

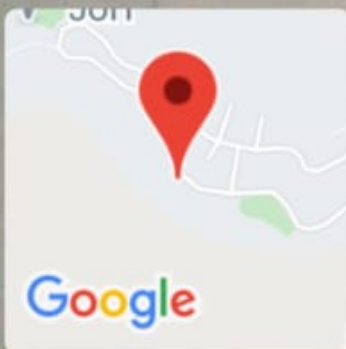
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Himachal Pradesh 173221, India

Lat N 31° 0' 57.1752"

Long E 77° 4' 9.786"

09/11/20 02:49 PM

SURGICAL AUTOCLAVE



Waknaghat, Himachal Pradesh, India

Civil Engineering Department , JUIT-Waknaghat , Waknaghat,
Himachal Pradesh 173221, India

Lat N 31° 0' 57.1752"

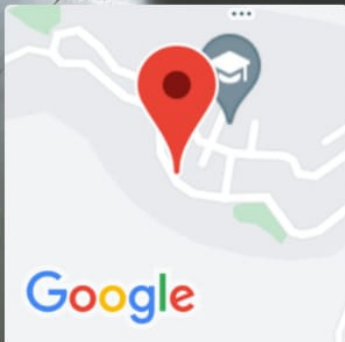
Long E 77° 4' 9.786"

09/11/20 02:46 PM

INCUBATOR



GPS Map Camera



Solan, Himachal Pradesh, India
2389+9RG, Himachal Pradesh 173231, India
Lat 31.016005°
Long 77.069437°
25/08/22 01:06 PM

1493.5 m

OPEN CHANNEL FLUME 15 Mtr



Solan, Himachal Pradesh, India

Civil Engineering Department ,JUIT-Waknaghat Rd, Himachal Pradesh 173221, India

Lat N 31° 0' 59.7744"

Long E 77° 4' 13.296"

12/11/20 01:44 PM

ACOUSTIC DOOPLER VELOSIMETER



GPS Map Camera



Solan, Himachal Pradesh, India
2389+9MJ, Himachal Pradesh 173221, India
Lat 31.015919°
Long 77.069263°
26/08/22 11:44 AM

1493 m

DIRECT SHEAR TEST APPARATUS DIGITAL



TRIAxIAL SHEAR TEST APPARATUS



UNCONFINED COMPRESSIVE TEST APPARATUS



SWELL TEST APPARATUS



Waknaghat, Himachal Pradesh, India

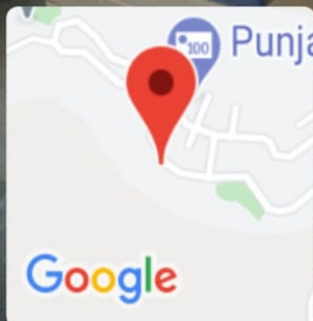
Civil Engineering Department , JUIT-Waknaghat , Waknaghat,
Himachal Pradesh 173221, India

Lat N 31° 0' 57.1752"

Long E 77° 4' 9.786"

09/11/20 03:56 PM

PERMEABILITY TEST APPARATUS



Wagnaghat, Himachal Pradesh, India

Civil Engineering Department , JUIT-Wagnaghat , Wagnaghat,
Himachal Pradesh 173221, India

Lat N 31° 0' 57.1752"

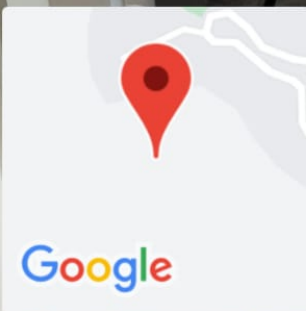
Long E 77° 4' 9.786"

09/11/20 03:57 PM

CONSOLIDATION TEST APPARATUS



GPS Map Camera




Solan, Himachal Pradesh, India

C2/3 Malviya Bhavan Jaypee University of Information Technology,
Himachal Pradesh 173234, India

Lat 31.015759°


Long 77.067032°

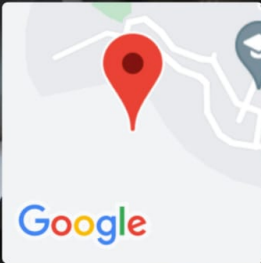
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 1492.9 m


SPT TEST APPARATUS



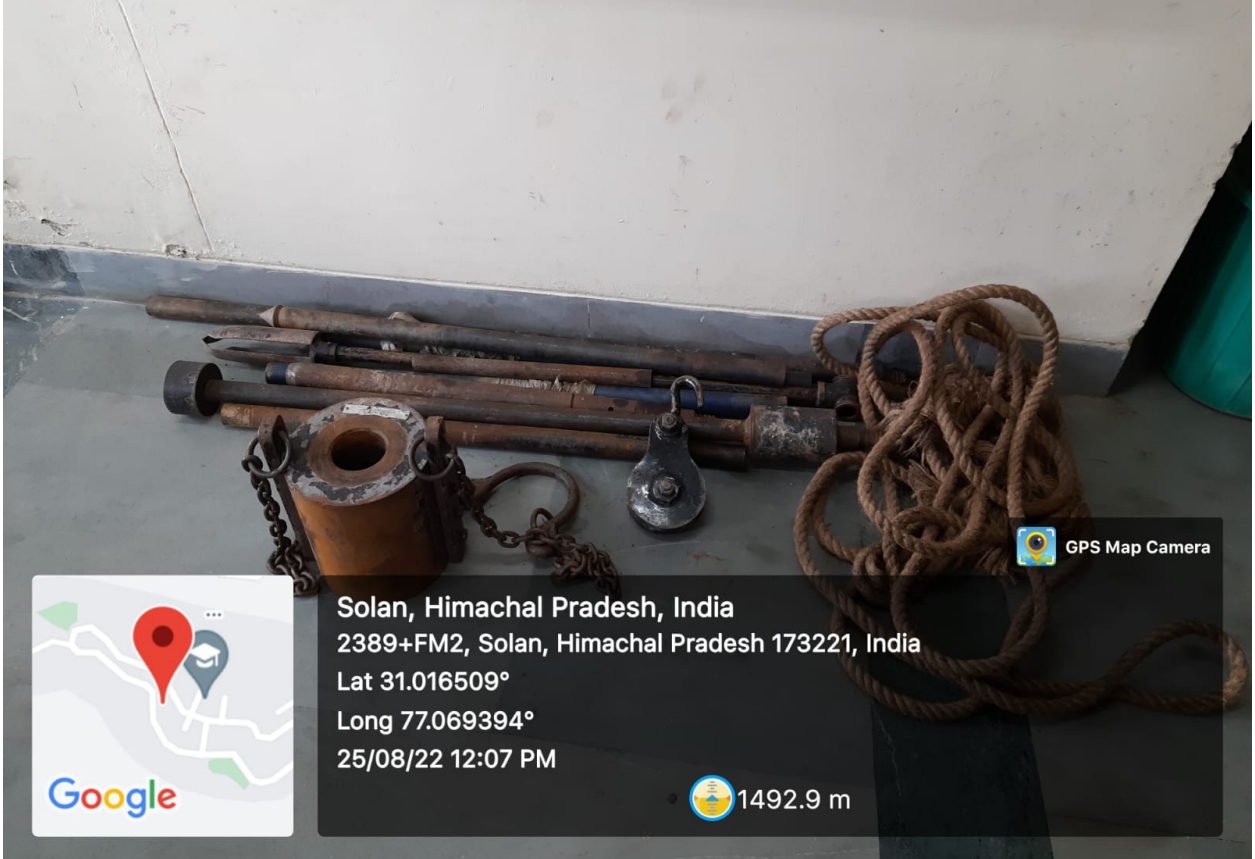
 GPS Map Camera



Solan, Himachal Pradesh, India
2389+PCW, Himachal Pradesh 173221, India
Lat 31.01596°
Long 77.067871°
25/08/22 12:07 PM

 1492.9 m

DCPT TEST APPARATUS



GPS Map Camera



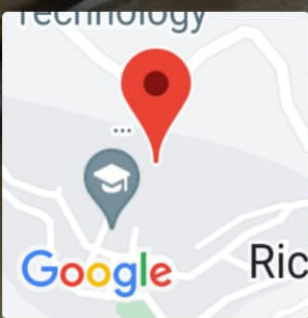
Solan, Himachal Pradesh, India
2389+FM2, Solan, Himachal Pradesh 173221, India
Lat 31.016509°
Long 77.069394°
25/08/22 12:07 PM

1492.9 m

VANE SHEAR TEST APPARATUS



GPS Map Camera



Solan, Himachal Pradesh, India

Jaypee University Of Information Technology, Himachal Pradesh 173221, India

Lat 31.017469°

Long 77.070834°

25/08/22 12:08 PM

1492.9 m

Laboratory Vane Shear Apparatus

PENETROMETER



Wagnaghat, Himachal Pradesh, India

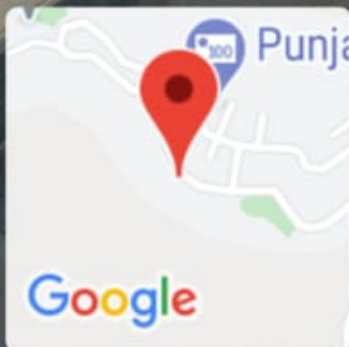
Civil Engineering Department , JUIT-Wagnaghat , Wagnaghat,
Himachal Pradesh 173221, India

Lat N 31° 0' 57.1752"

Long E 77° 4' 9.786"

09/11/20 04:13 PM

MERLIN APPARATUS



Waknaghat, Himachal Pradesh, India

Civil Engineering Department , JUIT-Waknaghat , Waknaghat,
Himachal Pradesh 173221, India

Lat N 31° 0' 57.1752"

Long E 77° 4' 9.786"

09/11/20 04:03 PM

LOS ANGELES ABRASION APPARATUS



Waknaghat, Himachal Pradesh, India

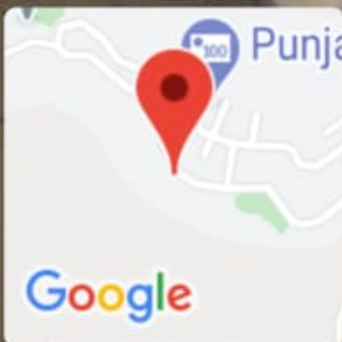
Civil Engineering Department , JUIT-Waknaghat , Waknaghat,
Himachal Pradesh 173221, India

Lat N 31° 0' 57.1752"

Long E 77° 4' 9.786"

09/11/20 04:12 PM

DUCTILITY TEST APPARATUS



Waknaghat, Himachal Pradesh, India

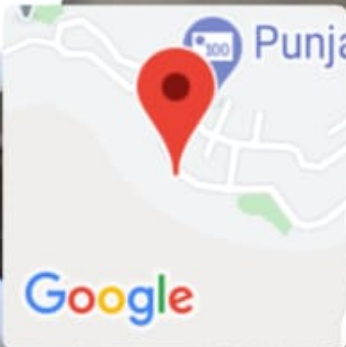
Civil Engineering Department , JUIT-Waknaghat , Waknaghat,
Himachal Pradesh 173221, India

Lat N 31° 0' 57.1752"

Long E 77° 4' 9.786"

09/11/20 04:13 PM

CBR TEST APPARATUS



Waknaghat, Himachal Pradesh, India

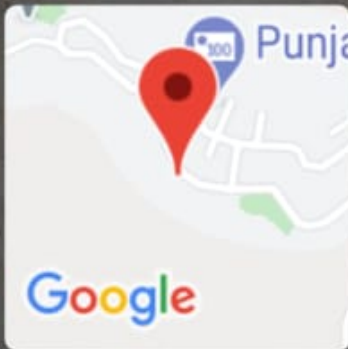
Civil Engineering Department , JUIT-Waknaghat , Waknaghat,
Himachal Pradesh 173221, India

Lat N 31° 0' 57.1752"

Long E 77° 4' 9.786"

09/11/20 04:15 PM

BENKELMAN BEAM APPARATUS



Waknaghat, Himachal Pradesh, India

Civil Engineering Department , JUIT-Waknaghat , Waknaghat,
Himachal Pradesh 173221, India

Lat N 31° 0' 57.1752"

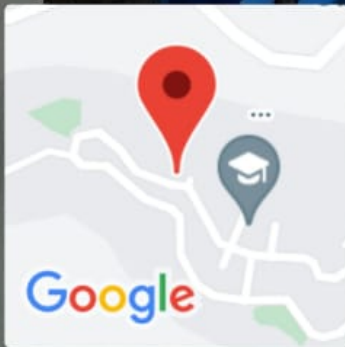
Long E 77° 4' 9.786"

09/11/20 04:15 PM

CORE CUTTER DIESEL ENGINE OPERATED



GPS Map Camera



Solan, Himachal Pradesh, India

Mughals, H-9 12, JUIT-Waknaghat Rd, Himachal Pradesh 173221, India

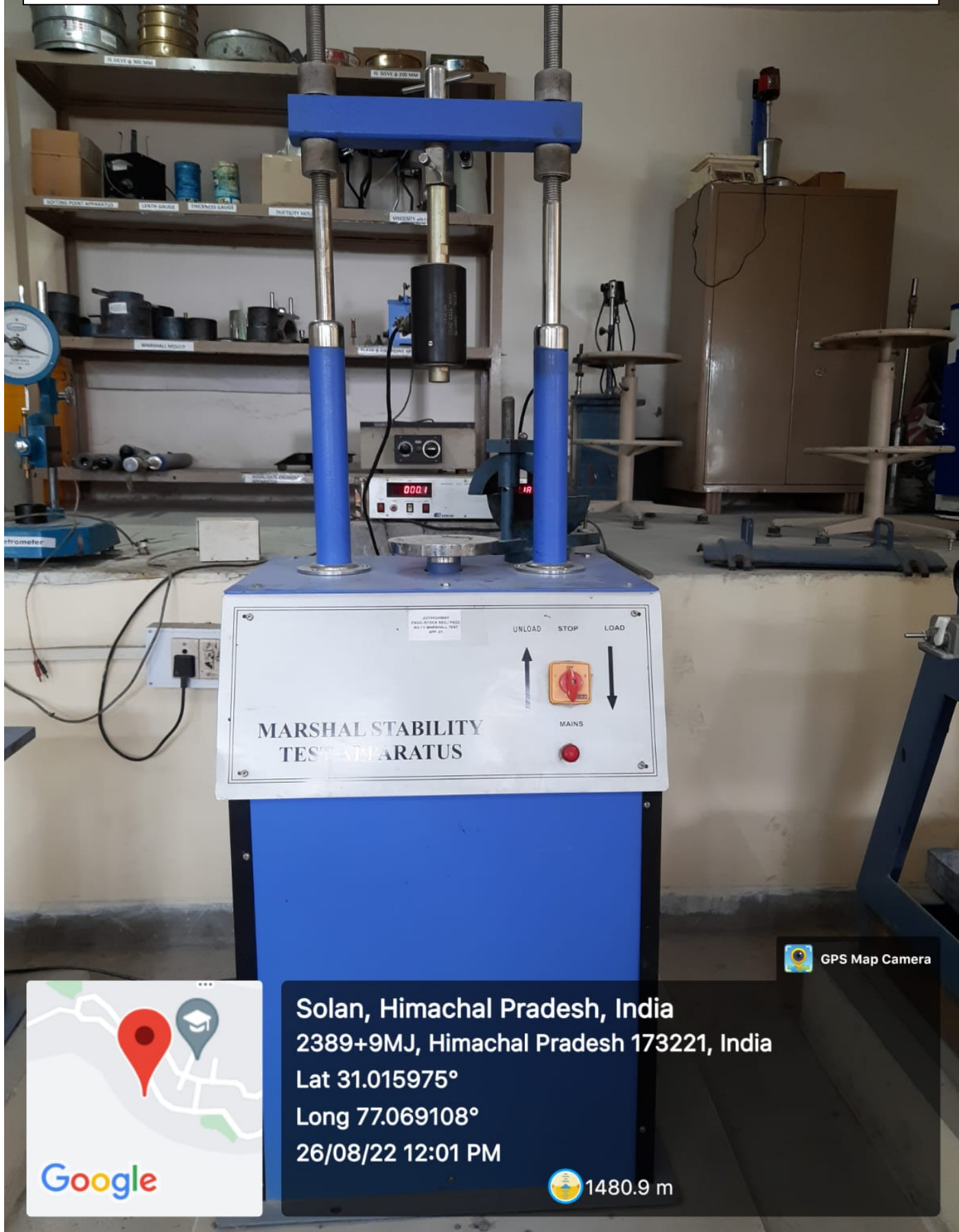
Lat 31.017204°

Long 77.069164°

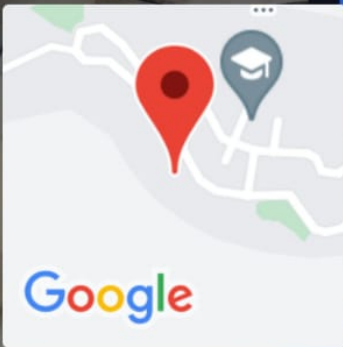
24/08/22 02:27 PM

1492.4 m

MARSHALL TEST APPARATUS DIGITAL



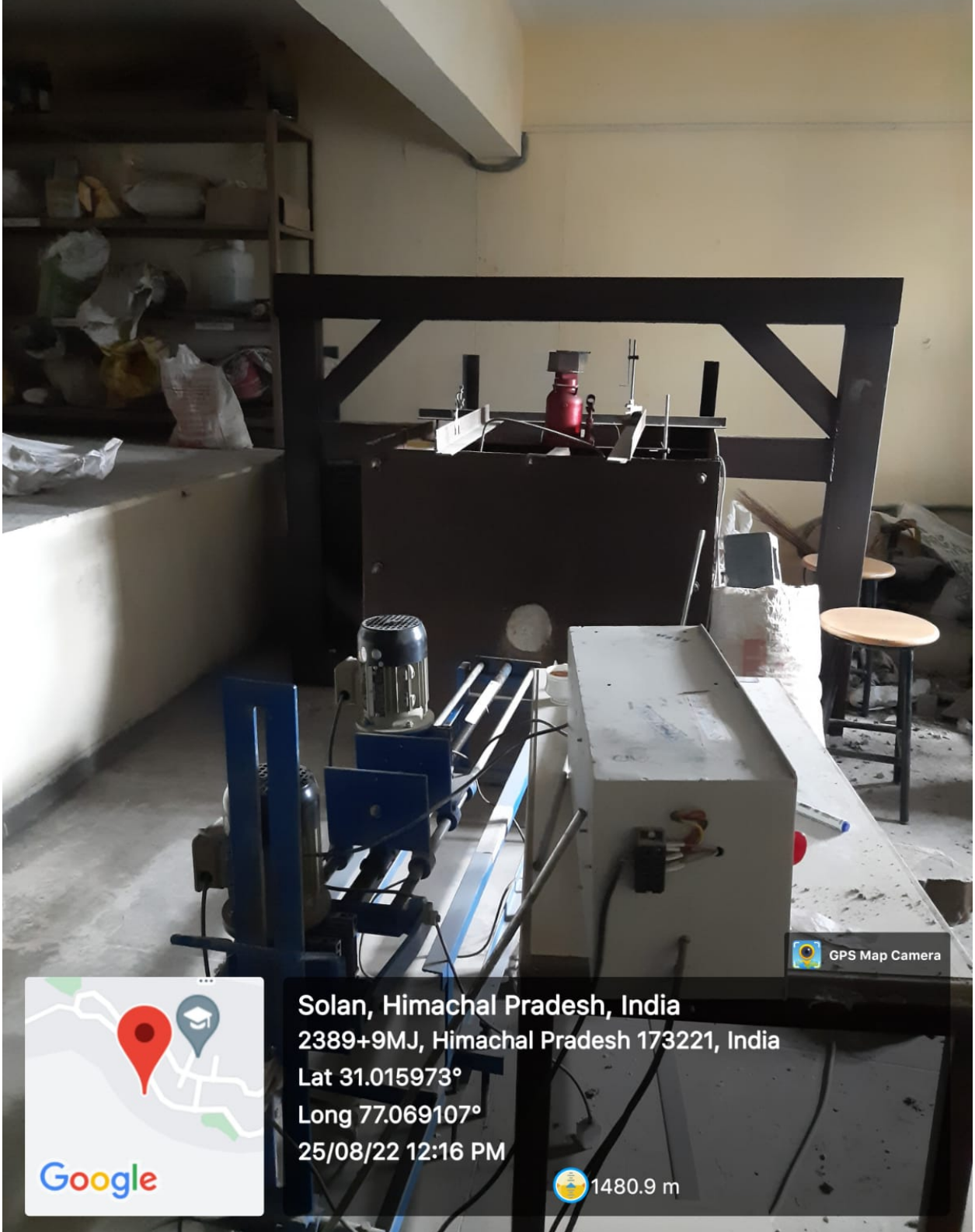
GPS Map Camera



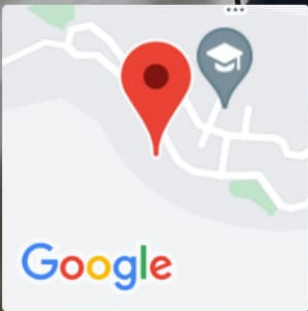
Solan, Himachal Pradesh, India
2389+9MJ, Himachal Pradesh 173221, India
Lat 31.015975°
Long 77.069108°
26/08/22 12:01 PM

1480.9 m

PULL OUT INSTRUMENTS FOR SOIL NAILS



GPS Map Camera



Solan, Himachal Pradesh, India
2389+9MJ, Himachal Pradesh 173221, India
Lat 31.015973°
Long 77.069107°
25/08/22 12:16 PM

1480.9 m