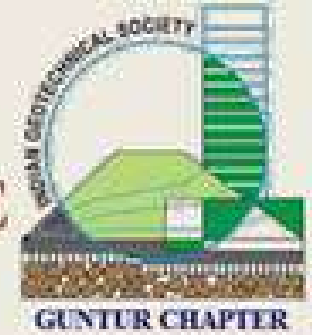




Organized by IGS Student chapter
GUDLAVALLERU ENGINEERING COLLEGE
SeshadriRao Knowledge Village, Gudlavalleru-521356, A.P



Live Speaker



Webinar Lecture on
" Modelling of Ground water
control during construction "

Time: 15th June , 2020
@ 11:00 AM India

Dr. S. Mohan,
Institute Chair Professor,
Environmental and Water Resources
Engineering Division,
Department of Civil Engineering,
Indian Institute of Technology Madras (IITM),
Chennai



Join Zoom Meeting

Meeting ID: 839 9047 8599
Password : 240200

Modelling Groundwater Control for Construction Dewatering



Dr. S. Mohan
 Institute Chair Professor
 Environmental & Water Resources Engg.,
 Dept. of Civil Engg.,
 Indian Institute of Technology Madras
 Chennai, India
smohan@iitm.ac.in



IGS Webinar Lecture on 15th June 2020



Outline...

- ✓ Introduction
- ✓ Basic Concepts of Systems & Modeling
- ✓ Groundwater Control in Construction Dewatering: Case Study of Delhi Metro
 - Aquifer Conceptualization
 - Simulation Model Development using Visual Modflow-Flex
 - Scenario Analysis
- ✓ Conclusions and Recommendations



SYSTEMS CONCEPTS

- What is a system ?
- The Systems Approach
- Classification of models

A system is composed of a large number of interacting components, each of which may or may not serve a different function but all of which contribute to a common purpose.

Any part does not function properly → Affect whole system

The Structure of a System

Three Distinct Parts of Systems

Inputs

Processes

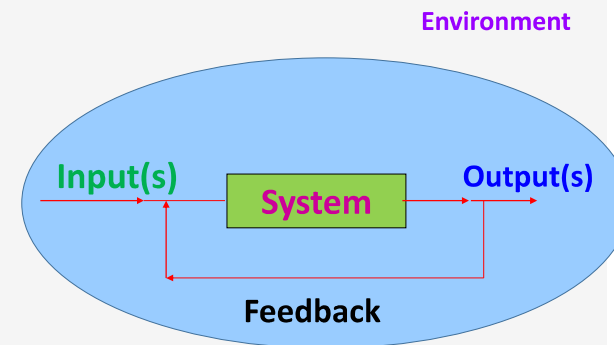
Outputs

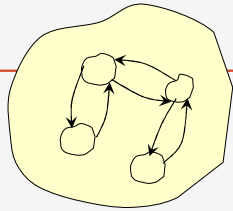
Systems

Are surrounded by an environment

Frequently include a feedback mechanism

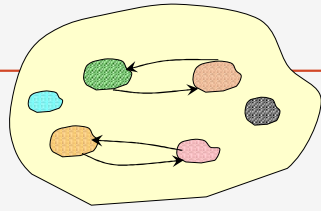
A human, the decision maker, is usually considered part of the system





SYSTEM

- Parts are arranged
- No subset is unrelated to any other



AGGREGATE

- Parts are added

Every thing excluded → System Environment

SYSTEMS APPROACH

When do we need systems approach?

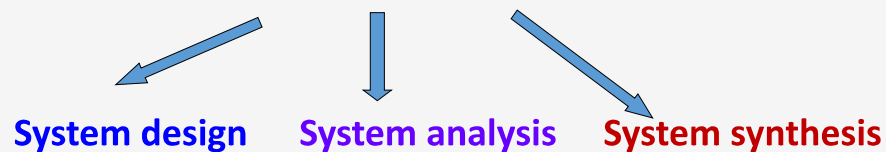
- System is large and complex
- System involves / necessitates knowledge from many disciplines
- The objective could be quantified in mathematical terms (or logical terms)
- One or more variables involve uncertainty
- The problem has many alternative solutions

Systems approach

System



System study



SYSTEMS APPROACH

Systems Analysis

- Methodology that attempts to quantitatively evolve alternate courses of actions using mathematical models and provide a means of evaluating in an orderly fashion with the aim of selecting those that are better than others.
- Process of separating into fundamental elements or components for detailed examination of them to understand nature and to determine their essential features and alternate courses of action after evaluating them.

System Design

- Process of selecting components and of contriving elements, steps and procedures for producing a system that will optimally satisfy the stated goals.

System Synthesis

A process akin to System Design. Fine-tuning the system and components to achieve the finest level of performance.

GUDLAVALLERU ENGINEERING COLLEGE

Seshadri Rao Knowledge Village:: Gudlavaluru

DEPARTMENT OF CIVIL ENGINEERING

List of Participants attended for the programme organised on 15 June 2020

S No	Full name	Designation	Organisation	Place of work	Mobile No
1	Reena James Rodrigues	PG student	Basaveshwar Engineering College Bagalkot	Bagalkot	9900326237
2	B R Madhusudhan	Researcher	IIT Madras	Chennai	9880776358
3	Sambhav Takkamore	Student	St. Vincent palloti college of engineering and technology	Nagpur	9834081348
4	Gogineni Venkata Siva Abhilash	Student	V.R.Siddhartha Engineering College	Vijayawada	9492935646
5	HILAL AHMAD	Research scholar	NIT SRINAGAR	Srinagar	9796111624
6	sughosh P	Asst Prof	JNNCE Shimoga	Shimoga	9632048476
7	SUNIL KUMAR SIRIGIRIPET	Senior Geotechnical Engineer	Gulf Consult	Saudi Arabia	0550513847
8	Pranjal Mandhaniya	Research Scholar	IIT Delhi	IIT Delhi	7607454535
9	Abhijith G R	Research Scholar	IIT Madras	Chennai	8907578630
10	Adarsh H S	PG student	Basaveshwar Engineering College Bagalkot	Bagalkot	9538128455
11	Mohan Ramanathan	MD	ACT	Chennai	9840086350
12	P.v.prasad	Professor	Vikas group of institutions	Vijayawada	9848333095
13	R. Chitra	Joint Director	CSMRS	New Delhi	9811783189
14	Dola Roychowdhury	Principal Consultant	GCUBE Consulting Engineers llp	Pune	7011686485
15	Gaini pradeepa	Student	Kakatiya institute of technology and science for women	Nizamabad	7032390156
16	SUBBA RAO YARLAGADDA	ASSISTANT PROFESSOR	Gudlavaluru Engineering College.	Gudlavaluru	9291660001
17	Dr.S.Chandran	Associate Professor	Thiagarajar College of Engineering, Madurai	Madurai	9444108500
18	Razia Sultan	Student	NIT Srinagar	NIT Srinagar	9797137732
19	JAVEED FAROOQ BHAT	Student	National Institute of Technology, Srinagar	Student	7780955081
20	Prof. Bashir Ahmed Mir	Professor	N. I. T. Srinagar	N. I. T. Srinagar	9419002500
21	Adiki Purandhar	B.tech civil	Consultant	Hosapete	9880630530
22	VIVEK V S	M.Tech Student	Cochin University of Science and Technology	Kochi	7012094488
23	SMITA TUNG	Guest Faculty	Jadavpur University	kolkata	9007039179
24	G.sreeja	Student	Kakatiya institute of technology and science for women	Nizamabad	9490185005
25	MIRIYAM MANISHA	Student	B. Tech	Ongole	9392655512
26	Prakash V Surya	Senior Geotechnical Expert	AICA GC Mumbai Metro	Mumbai	7827145566
27	Dr. G. V. Rama Subba Rao	Associate Professor	Velagapudi Ramakrishna Siddhartha Engineering College	Vijayawada	9849448040
28	Jeykumar R K C	Assistant Professor	Thiagarajar College of Engineering	Madurai	9150077046
29	NAGIDI S P CHANDRA RAO	Asst.Professor	Sir C R Reddy College of Engineering	Eluru	9912868585
30	Chetlapally Harika	Student	Kakatiya institute of technology and science for women	Nizamabad	7901059875
31	Ajay Mishra	General Manager	Parsan	New Delhi	9868185200
32	Dr.Ch.Nageshwar Rao	Professor,	VNR Vignana Jyothi Institute of Engineering and Technology	Hyderabad	8713520251
33	Gayathri SS	Associate Professor	BMSIT	BMS Architecture	9781953439
34	ARATHY MENON	Assistant Professor	VIVA INSTITUTE OF TECHNOLOGY	Virar East	9673084835

35	Arindam Sarkar	Assistant Professor	Institute of Technology Gopeshwar	Uttarakhand	8794293654
36	Yagyesh Narayan Shrivastava	Contractual Teacher	Jawahar Lal Nehru Krishi Vishwa Vidyalaya	Jabalpur	9131873719
37	v hanumantha rao chittem	lecturer in civil engineering	Government Polytechnic	Daman	9703454799
38	P V S N Pavan Kumar	Professor	Guru Nanak Institutions Technical campus	Hyderabad	7013051317
39	FIZA ZAHOOOR MALIK	STUDENT	NIT SRINAGAR	Srinagar	9149486685
40	Changalpattu Naga Bharath	Assistant Professor	Gudlavalleru Engineering College	Gudlavalleru	8106111138
41	Sanjay Kumar Verma	Honorary Secretary	IGS Jabalpur Chapter	Jabalpur M.P.	9425803337
42	VENKATA NARAYANA KOLLA	Chief Geotechnical Engineer	osaimi engineering office	Saudi Arabia	6531894354
43	YASIR ALI QURASHI	STUDENT	NIT SRINAGAR	SRINAGAR	8493925574
44	Bolla .pushya sree Goud	student	pscmr	vijayawada	8179280292
45	LOGESH KUMAR P	Post Graduate Student	Thiagarajar College of Engineering	Madurai	8760232458
46	MUTHULAKSHMI K	Research Scholar	Anna University	Chennai	9840976074
47	Yanduri krishna chaitanya	Mtech	Gudlavalleru engineering college	Vijayawada	8125628879
48	Tanimki Chandra Sekhar Rao	Professor	Bapatla Engineering College	Bapatla	9848276672
49	Aaqib Ali	Student	National Institute of Technology Srinagar	Srinagar	7006755459
50	SEERAT RASHID	Student	NIT Srinagar	Srinagar	7006148237
51	Yasir Ali Qurashi	Mtech.Student	Nit srinagar	Srinagar	8493925574
52	Anayat Bashir	Student	NATIONAL INSTITUTE OF TECHNOLOGY SRINAGAR	SRINAGAR	7006348095
53	ADIL RASOOL KUMHAR	Student	National Institute of Technology Srinagar	Srinagar	9906484070
54	IRFAN AHMAD KUMAR	Mtech	NIT SRINAGAR	Srinagar	9906527079
55	PHANI KUMAR VADDI	Sr.Gr.Assistant Professor	Gudlavalleru Engineering College	Gudlavalleru	9885606107
56	Aaqib Ali	Student	National Institute of Technology Srinagar	Srinagar	7006755459
57	Sameer Ahmad Bhat	Student	National Institute of Technology Srinagar	Srinagar	7006793271
58	K S V DHANUSH	Student	IIT Madras	IIT Madras	8919099919
59	Dr Kadali Srinivas	Associate Professor	VNR VJIET	Hyderabad	8552934111
60	Sreeja Pekkatt	Associate Professor	IIT Guwahati	IIT Guwahati	9435707140
61	Yadugani Srinivas	Research Scholar, MD, R&D	Anantha Rushi Constructions Pvt Ltd	India	9849641543
62	Midhat Sajad	Student	IIT(ISM)	Dhanbad	7006399366
63	WASEEL AHMAD DAR	student	Civil engineering	Nit Srinagar	7006149371
64	SALMAN SADAT	Student	NIT Srinagar	Srinagar	9596920424
65	Patibandla Tulasi Tarakeswari	Student	KHIT	Student	6305389852
66	Sandhya Makineni	Assistant professor	Gudlavalleru Engineering College	Gudlavalleru	9949449648
67	Akula Priyank	Assistant Professor	QIS College of Engineering and Technology	Ongole	9494171623
68	sachin d	am	ict	delhi	8762696586
69	Mohd idrees	Student	NIT SRINAGAR	Srinagar	9682674405

GUDLAVALLERU ENGINEERING COLLEGE

(An Autonomous Institute with Permanent Affiliation to JNTUK, Kakinada)

Seshadri Rao Knowledge Village, Gudlavalleru

Department of Civil Engineering

STUDENT DEVELOPMENT PROGRAMME

Academic Year:- 2019-20

Programme No:- 4

Title of Programme:- Modelling of Groung Water Control During Construction

Resource Person Details:-

Sl.No	Resource Persons	Designation	Oraganization
1	Dr.S.Mohan	Institute ChairProfessor, Environmental and water Resources Engineering Division	IIT Madras(IITM)

Object(S) of the programme: -The objective of this programme is to provide an opportunity for the students to gain knowledge on the ground water control during construction.

Expected Outcome: - The students are expected to gain exposure on the programming skills and implement them to solve civil engineering problems

Target Audience: - II,III & IV B.Tech CE Students

No. of Audience: - 70




Coordinator


H.C.E

Head of Civil Engineering
Gudlavalleru Engineering College
Seshadri Rao Knowledge Village
GUDLAVALLERU-521356.