

UNIVERSIDAD MICHOACANA DE SAN NICOLAS DE HIDALGO STUDENT CHAPTER



Presentation of Michoacana student chapter

By: C. Antonio Maldonado Huante President of student chapter

Ph.D. Candidate José Alberto Guzmán Torres Vice-president





ABOUT US

- We are a student chapter located on Morelia Michoacan Mexico and we belong to the Michoacan university.
- We have 1 year but in that year we are learn a lot of things relational of concrete.
- We are excited for contribute to the development of the infrastructure in our country and why not? On the world too.

THE FACTS

Concrete is one of the most construction materials.



In our country the infrastructure that seems to have reached the limit state of service



Maintenance cost high

The background of the slide is a solid black field. At the top, there is a decorative horizontal band with a wavy, fluid appearance. This band features a color gradient: on the left, it transitions from yellow to orange; on the right, it transitions from green to light blue. The colors blend into each other, creating a sense of motion and energy.

SOME ACTIVITIES...

TECHNICAL VISITS



The last year we visit a different kind of constructions, for example, the new avenue "Ramal Camelinas" these are important and relevant infrastructure for the development of our town.



COMPETITIONS



We participated in the national competition of concrete cubes and we obtained the first place in the XXXIV OlimpiANEIC. The event was in Obregon city.

Universidad Michoacana de San Nicolás de Hidalgo
Facultad de Ingeniería Civil
El Laboratorio de Materiales "Ing. Luis Silva Ruelas"

CONVOCA

7mo CONCURSO INTERNO DE DISEÑO DE MEZCLAS DE CONCRETO

INSCRIPCIONES
DEL 18 AL 30 DE OCTUBRE DE 2018
EN EL LABORATORIO DE MATERIALES
SECCIÓN DE RESISTENCIA DE MATERIALES.

ELABORACIÓN DE MUESTRAS:
13 DE NOVIEMBRE

FECHA DEL CONCURSO:
11 DE DICIEMBRE DEL 2018

Requisitos

- ✓ Aprobado asignatura de tecnología del concreto
- ✓ Promedio ≥ 7.5 general
- ✓ Contar con un asesor del departamento de materiales
- ✓ Equipos hasta de un máximo de 4 estudiantes

Informes:
Laboratorio de Materiales
Sección de Resistencia de Materiales
Tel: (443) 322 35
C.O. Ext: 4327

Facultad de Ingeniería Civil, Dirección UMSNH
ANEXO DELEGACIÓN UMSNH
Capítulo estudiantil del ACI UMSNH

We will keep work...

Intermittent reinforcement or extinction?

Ing. Alberto Guzman 443-1392310
 Jessica Enriquez 443-4878470
 Antonio Muldonado 443-1006805
 Stephany Nunez 445-4102787
 Bioherberto Gomez 443-1751067







CONFERENCIAS MAGISTRALES

El sismo del 19 de septiembre de 1985

Dr. Hugo Hernández García, Facultad de Ingeniería Civil, UNAM-H
 Jueves 26 de octubre de 2017, 17:00 h
 Colegio de Ingenieros Civiles de Michoacán

Reacciones y acciones en el sismo de 1985

Reflexión
 Jueves 26 de octubre de 2017, 18:30 h
 Colegio de Ingenieros Civiles de Michoacán

El sismo del 19 de septiembre de 2017

Dr. Darío Rivera Vargas
 PESA UNAM
 Puesta a punto de la capacidad Sísmica de Ingeniería Sísmica 2018-2020
 Viernes 27 de octubre de 2017, 18:30 h
 Auditorio de la FCU UNAMH

Tecnologías de Protección Sísmica: Una Realidad en Latinoamérica

Dr. Carlos Méndez Salcedo
 Director de Disposiciones Sísmicas de MASECSA (Internacional)
 Viernes 27 de octubre de 2017, 13:00 h
 Auditorio de la FCU UNAMH

La Evaluación y Dictamen Estructural, Brigada 14, Ciudad de México

Mé Carlos Ríos León
 UNAM, Unidad de Investigación Multidisciplinaria
 Viernes 27 de octubre de 2017, 12:30 h
 Auditorio de la FCU UNAMH




SISMOS

19 SEP.

1985

2017




AGU Capital Ciudad de México, FCU UNAMH



SEMINARIO ESTATAL "CONCRETO Y CONSTRUCCIÓN"
Conferencia magistral

Tendencias estratégicas en concreto

Imparte:
Dr. Juan Carlos Rubio Arzola
Investigador de la Facultad de Ingeniería Civil, UNAM

Jueves 08 de septiembre del 2016
Horario: 9:00 am - 10:00 am

Acceso a evento
\$150 miembros del CE ACI
\$150 estudiantes
\$200 profesionales

Infórmate a: inscripciones.aci@ciqa.org.mx
Jocita Escobedo 45248/9491





REFRESHER COURSES



UMSNH
El laboratorio de materiales
"Ing. Luis Silva Ruelas"

INVITA:

A todos los estudiantes de la Facultad de Ingeniería Civil a la reunión informativa sobre los cursos-talleres que se impartirán en la facultad de ingeniería civil, por parte del **CAPÍTULO ESTUDIANTIL ACI UMSNH**.

QUE SE LLEVARA A CABO EN EL AUDITORIO DE LA FACULTAD DE INGENIERÍA CIVIL, EL DÍA **MIÉRCOLES 11 DE OCTUBRE A LA 1:00 PM**.



We try to learn and share information with our partners in the faculty, for this reason, we searched experts and we offer refresher courses, for example, modeling and design of buildings of concrete and things like that.



NOWADAYS...

- We work with natural additives for the concrete, for example:
- Natural organic polymers like starch and nopal
- Industry residues
- And others
- The goal is improve the behavior of the infrastructure with ecologic additions and we will work with this...

CONCRETE WITH A POLYMER ORGANIC ADDED

- Two components: aggregates and cementitious matrix.
- Usually the aggregates are divided into groups: thin and thick



Components of concrete: cement, water, thin aggregates, thick aggregates

THE PROBLEM



Rigids Pavements in bad state in Michoacán. Source J. A. Guzmán

THE AGGREGATES



*Sand of
Joyitas bank*



Thin aggregates



Bank of Tarímbaro



Thick aggregates

COMPARISON

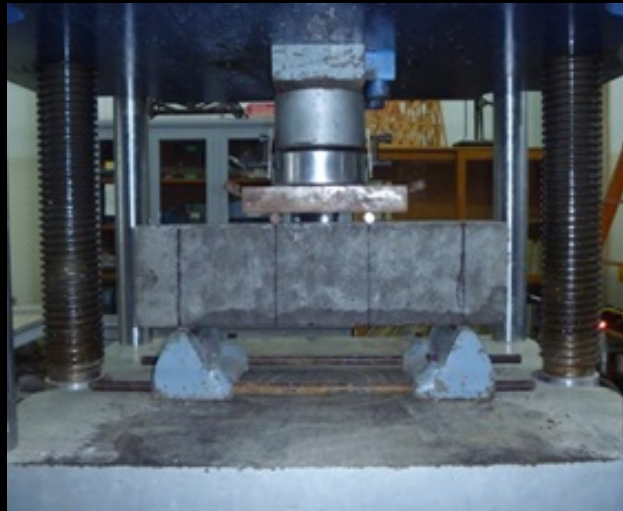
We talk about of 3 mixtures:

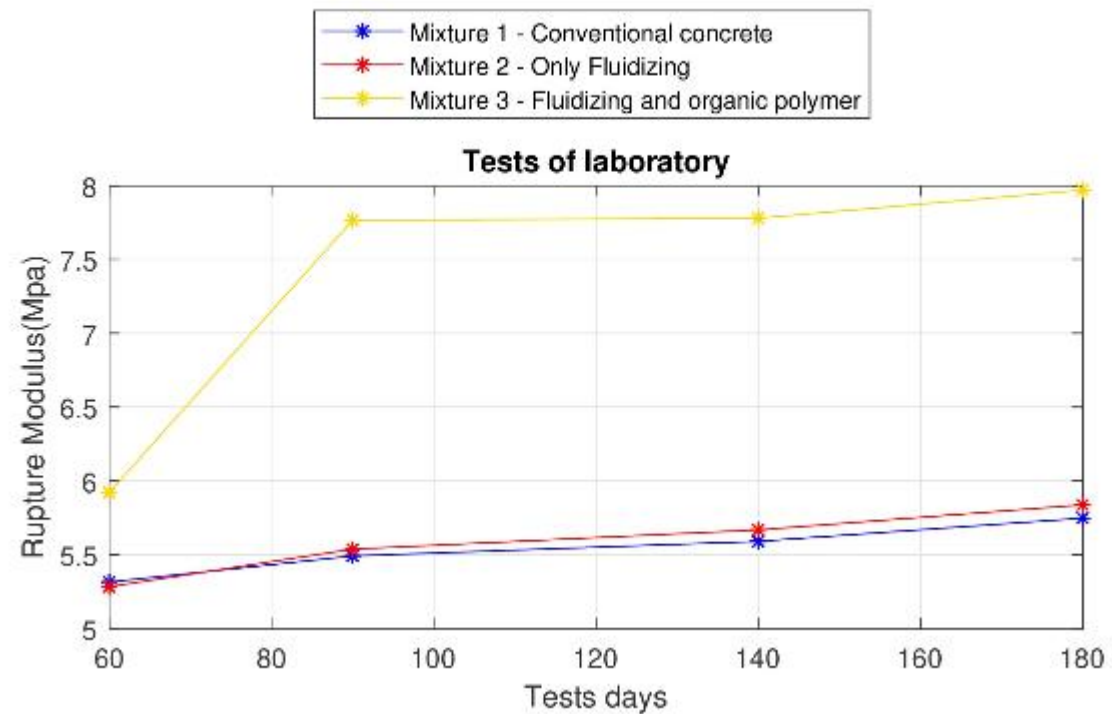
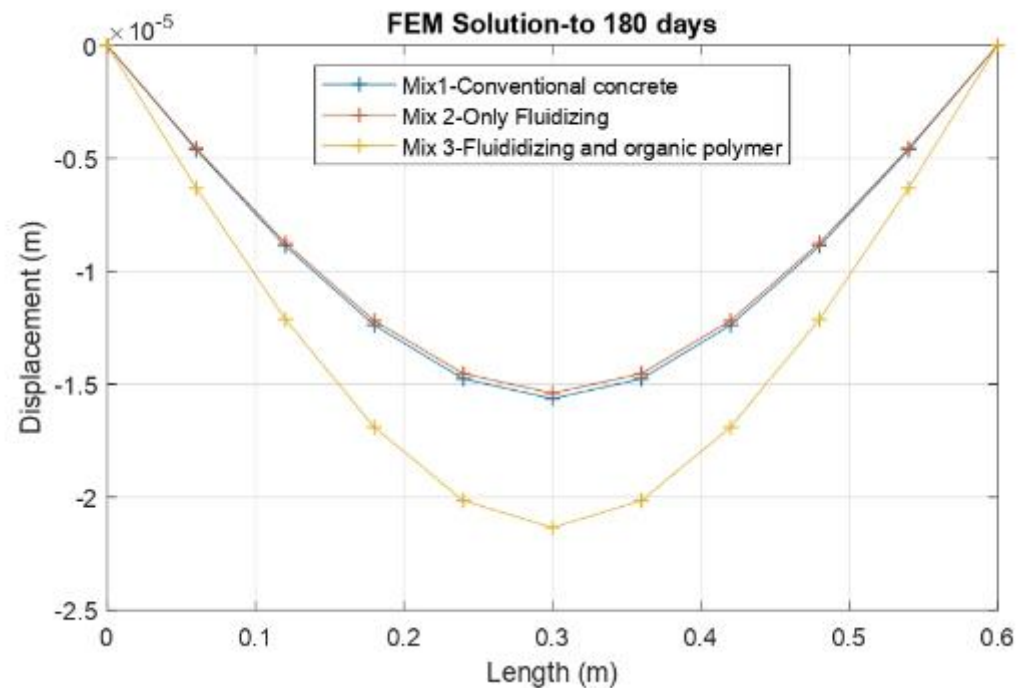
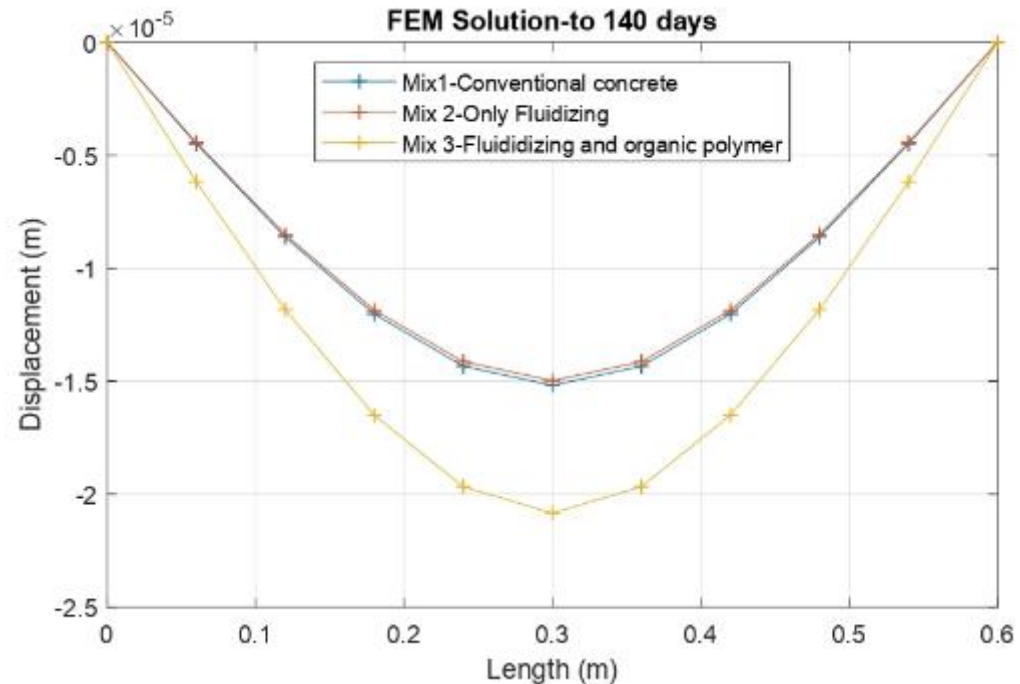
- Mixture 1. Conventional concrete
- Mixture 2. Concrete with a fluidizing added
- Mixture 3. Concrete with a fluidizing and organic polymer added



BEAM ELEMENT

- The specimens were produced and tested under controlled conditions.
- Displacement can't be easily measured



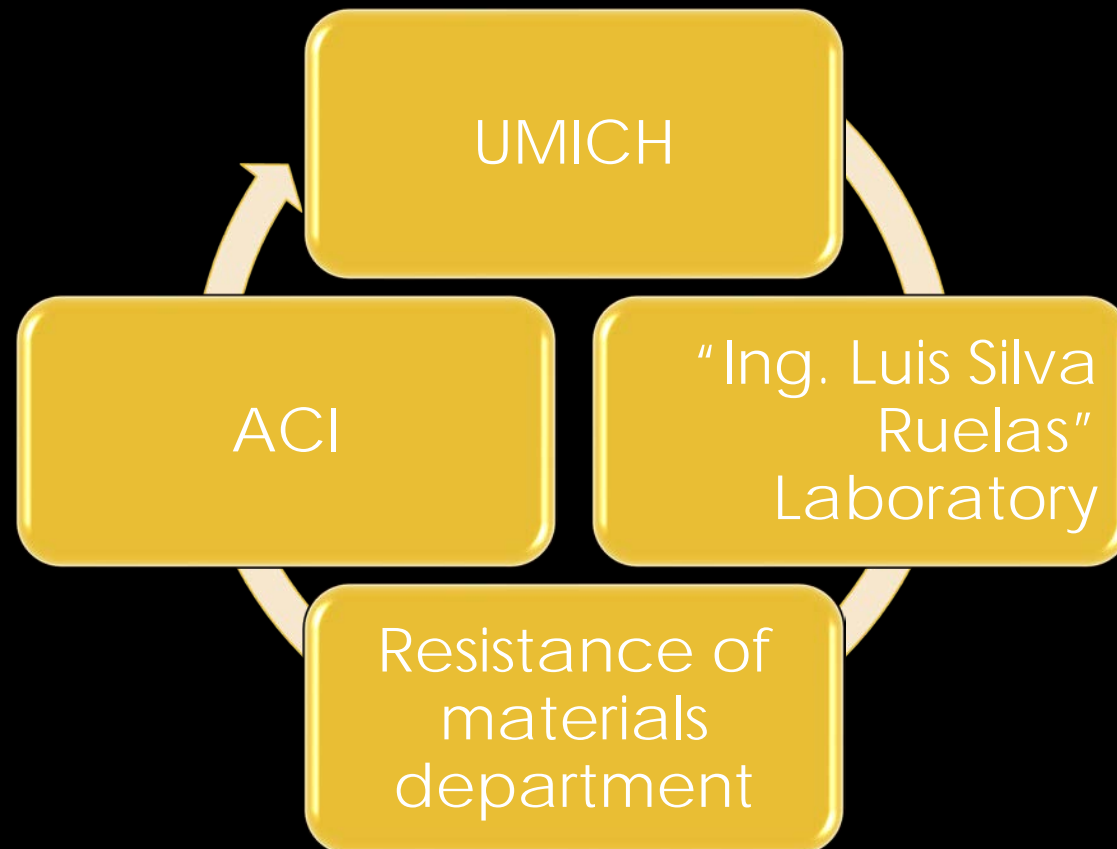




CONCLUSIONS

- The mixture with the organic polymer showed the best performance.
- The rupture modulus of the mixture with polymer has higher displacement and this supports more load in comparison with the others mixtures.
- The calculated solution has the same trend that the tests in the laboratory, and we can say that is a right approximation.

ACKNOWLEDGMENT



THANKS FOR YOUR ATTENTION

