ISSMGE

International Society for Soil Mechanics & Geotechnical Engineering

Technical Oversight Committee (TOC)

Dr Marcelo Sanchez
TOC Chair
Professor Civil & Environmental Engineering Texas A&M University, USA.

Observational Method Conference

Tue 17 Mar | London

SIMSG ISSMGE

Technical Oversight Committee (TOC)

ISSMGE SIMSG

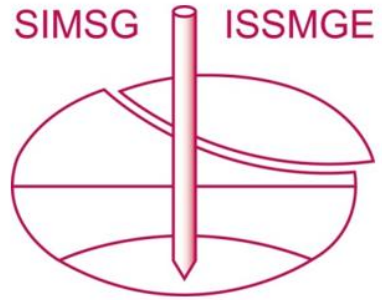
91 Country Members

Presidents of ISSMGE

1936 – 1957 K. Terzaghi (USA)
1957 – 1961 A. W. Skempton (UK)
1961 – 1965 A. Casagrande (USA)
1965 – 1969 L. Bjerrum (Norway)
1969 – 1973 R. B. Peck (USA)
1973 – 1977 J. Kerisel (France)
1977 – 1981 M. Fukuoka (Japan)
1981 – 1985 V. F. B. de Mello (Brazil)
1985 – 1989 B. B. Broms (Singapore)
1989 – 1994 N. R. Morgenstern (Canada)
1994 – 1997 M. Jamiolkowski (Italy)
1997 – 2001 K. Ishihara (Japan)
2001 – 2005 W. Van Impe (Belgium)
2005 – 2009 P.S. Sêco e Pinto (Portugal)
2009 – 2013 J.L. Briaud (USA)
2013 – 2017 R. Frank (France)
2017 – 2022 C.W.W. Ng (Hong Kong)
2022 – 2026 M. Ballouz (USA/Lebanon)

➢ Technical Committees

"TCs are forum for discussing, developing and applying specialist geotechnical knowledge related to the behaviour of geo-materials, geotechnical engineering and engineering for society"



➢ Technical Committees Objectives

- ✓ **Develop** and **disseminate knowledge** and **practice** within the topic of the TC to the membership of the ISSMGE.
- ✓ Establish **guidelines** and technical **recommendations** within the topic of the TC.
- ✓ **Assist** with technical programs of **international** and **regional conferences** organised by the ISSMGE.
- ✓ **Interact** with **industry** and overlapping groups working in areas related to the **specialist area** of the **TC**.

➢ Technical Committees Activities (examples)

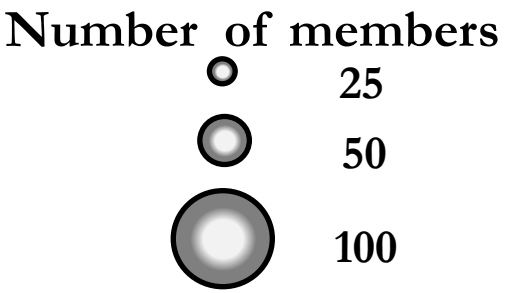
- ✓ Regular TC meetings
- ✓ Updated TC website
- ✓ Organization of technical events (conference, workshop, short course)
- ✓ Develop/organize technical publications/guidelines
- ✓ Involvement in ISSMG initiative (e.g., Virtual University, Webinar, Time Capsule Project, ISSMG Interactive Technical Talks)

➢ Technical Committees Overview

- ✓ The 38 Technical Committees (TCs) of the ISSMGE are the foundation on which the technical and scientific activities of the ISSMGE are based.
- ✓ They are managed by a Chair and a Secretary and, if deemed necessary, a Vice-Chair.
- ✓ They are composed of 4 members appointed by the Chair (with voting right), of 2 members per Member Society (with voting right) and of corresponding members (with no voting right, unlimited number).
- ✓ The functioning of the TCs, based on a volunteer basis, is supervised by the Technical Oversight Committee and defined in the "Guidelines for ISSMGE Technical Committees and ISSMGE Honour Lectures"

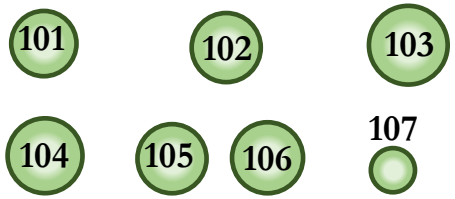
Category	TC Short Name	TC Official Name	TC#
Fundamentals	Laboratory Testing	Laboratory Stress Strain Strength Testing of Geomaterials	TC101
Fundamentals	In-Situ Testing	Ground Property Characterization from In-Situ Tests	TC102
Fundamentals	Numerical Methods in Geomechanics	Numerical Methods	TC103
Fundamentals	Physical Modelling	Physical Modelling in Geotechnics	TC104
Fundamentals	Geo-mechanics	Geo-Mechanics from Micro to Macro	TC105
Fundamentals	Unsaturated Soils	Unsaturated Soils	TC106
Fundamentals	Tropical Residual Soils	Tropical Residual Soils	TC107
Applications	Dykes and Levees	Geotechnical Aspects of Dykes and Levees and Shore Protection	TC201
Applications	Transportation	Transportation Geotechnics	TC202
Applications	Earthquake	Earthquake Geotechnical Engineering and Associated Problems	TC203
Applications	Underground Construction	Underground Construction in Soft Ground	TC204
Applications	Safety and Serviceability	Safety and Serviceability in Geotechnical Design	TC205
Applications	Interactive Design	Interactive Geotechnical Design	TC206
Applications	Slope Stability	Slope Stability in Engineering Practice	TC208
Applications	Offshore	Offshore Geotechnics	TC209
Applications	Embankment Dams	Embankment Dams	TC210
Applications	Ground Improvement	Ground Improvement	TC211
Applications	Deep Foundations	Deep Foundations	TC212
Applications	Scour and Erosion	Scour and Erosion	TC213
Applications	Soft Soils	Foundation Engineering for Difficult Soft Soil Conditions	TC214
Applications	Geo-Environmental	Environmental Geotechnics	TC215
Applications	Frost	Frost Geotechnics	TC216
Applications	Land Reclamation	Land Reclamation	TC217
Applications	Reinforced Fill Structures	Reinforced Fill Structures	TC218
Applications	System Performance	System Performance of Geotechnical Structures	TC219
Applications	Field Monitoring	Field Monitoring in Geomechanics	TC220
Applications	Tailing and Mine Wastes	Tailing and Mine Wastes	TC221
Applications	Geotechnical BIM and DT	Geotechnical BIM and Digital Twins	TC222
Impact on Society	Historic Sites	Preservation of Historic Sites	TC301
Impact on Society	Forensic	Forensic Geotechnical Engineering	TC302
Impact on Society	Floods	Coastal and River Disaster Mitigation and Rehabilitation	TC303
Impact on Society	Risk	Engineering Practice of Risk Assessment and Management	TC304
Impact on Society	Megacities	Geotechnical Infrastructure for Megacities and New Capitals	TC305
Impact on Society	Geo-education	Geo-engineering Education	TC306
Impact on Society	Sustainability	Sustainability in Geotechnical Engineering	TC307
Impact on Society	Energy Geotechnics	Energy Geotechnics	TC308
Impact on Society	Machine Learning	Machine Learning and Big Data	TC309

➢ Technical Committees Categories



Technical Oversight Committee

Fundamentals

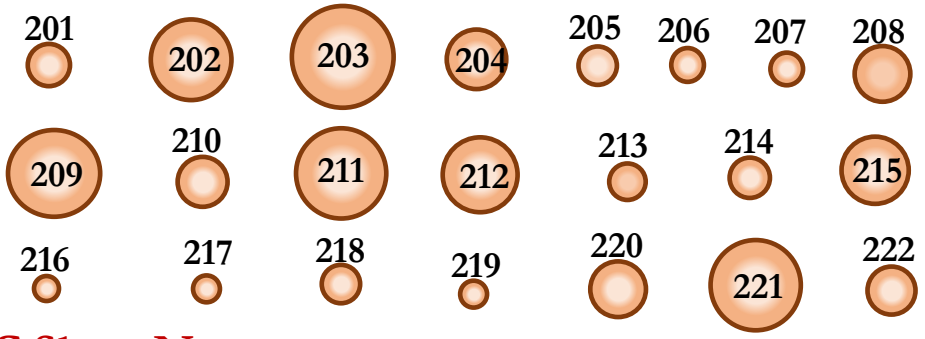


TC Short Name

101 Laboratory Testing
102 In-Situ Testing
103 Numerical Methods in Geomechanics
104 Physical Modelling
105 Geo-mechanics
106 Unsaturated Soils
107 Tropical Residual Soils

~ 2200 members in all TCs

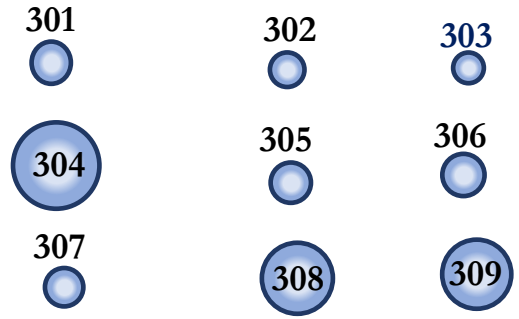
Applications



TC Short Name

201 Dykes and Levees
202 Transportation
203 Earthquake
204 Underground Construction
205 Safety and Serviceability
206 Observational Method
207 Soil-Structure
208 Slope Stability
209 Offshore
210 Embankment Dams
211 Ground Improvement
212 Deep Foundations
213 Scour and Erosion
214 Soft Soils
215 Geo-Environmental
216 Frost
217 Land Reclamation
218 Reinforced Fill Structures
219 System Performance
220 Field Monitoring
221 Tailing and Mine Wastes
222 Geotechnical BIM and DT

Impact on Society



TC Short Name

301 Historic Sites
302 Forensic
303 Floods
304 Risk
305 Megacities
306 Geo-education
307 Sustainability
308 Energy Geotechnics
309 Machine Learning

SIMSG ISSMGE

Technical Oversight Committee (TOC)

➢ TOC Leadership Team

Chair: Dr Marcelo Sanchez
Prof. Civil and Environmental Engineering.
Texas A&M University, USA.

Vice-Chair: Dr Susmita Sharma
Assistant Prof. National Institute of Technology Meghalaya, India.

Secretary: Dr. Mabel Chedid
Senior Geotechnical and Tunnel Engineer at WSP. Technical Principal.

➢ TOC Support Team

Dr. Pierre Delage
Former TOC Chair

Dr. Dimitrios Zekkos
Appointed Board Member

Dr. Mona El-Din Anwar
Professional Image Committee

Vice Presidents

Dr. Marawan Shahien
Africa

Dr. Keh-Jian Shou
Asia

Mr. Graham Scholey
Australasia

Dr. Lyesse Laloui
Europe

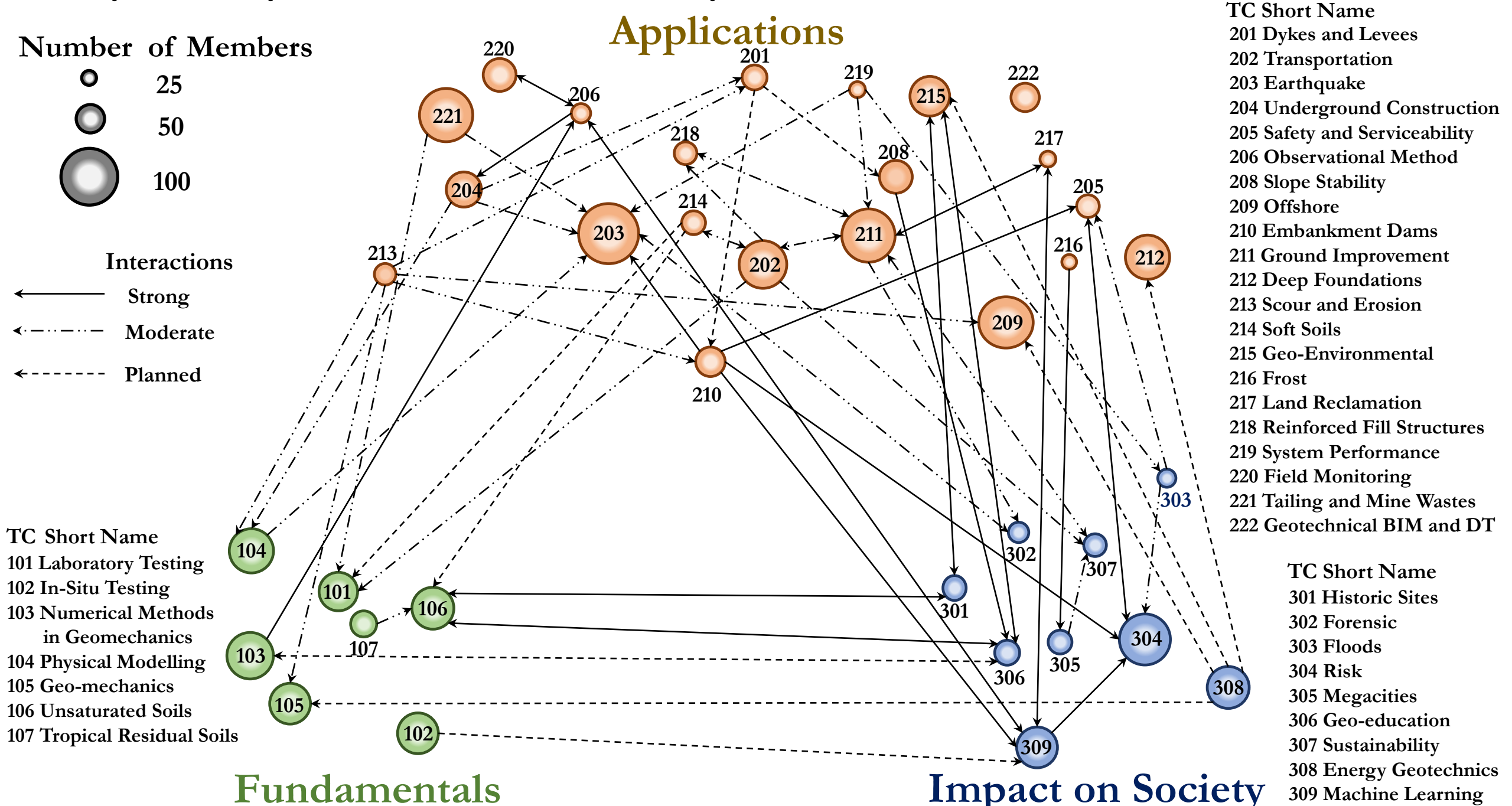
Dr. Walter Paniagua
North America

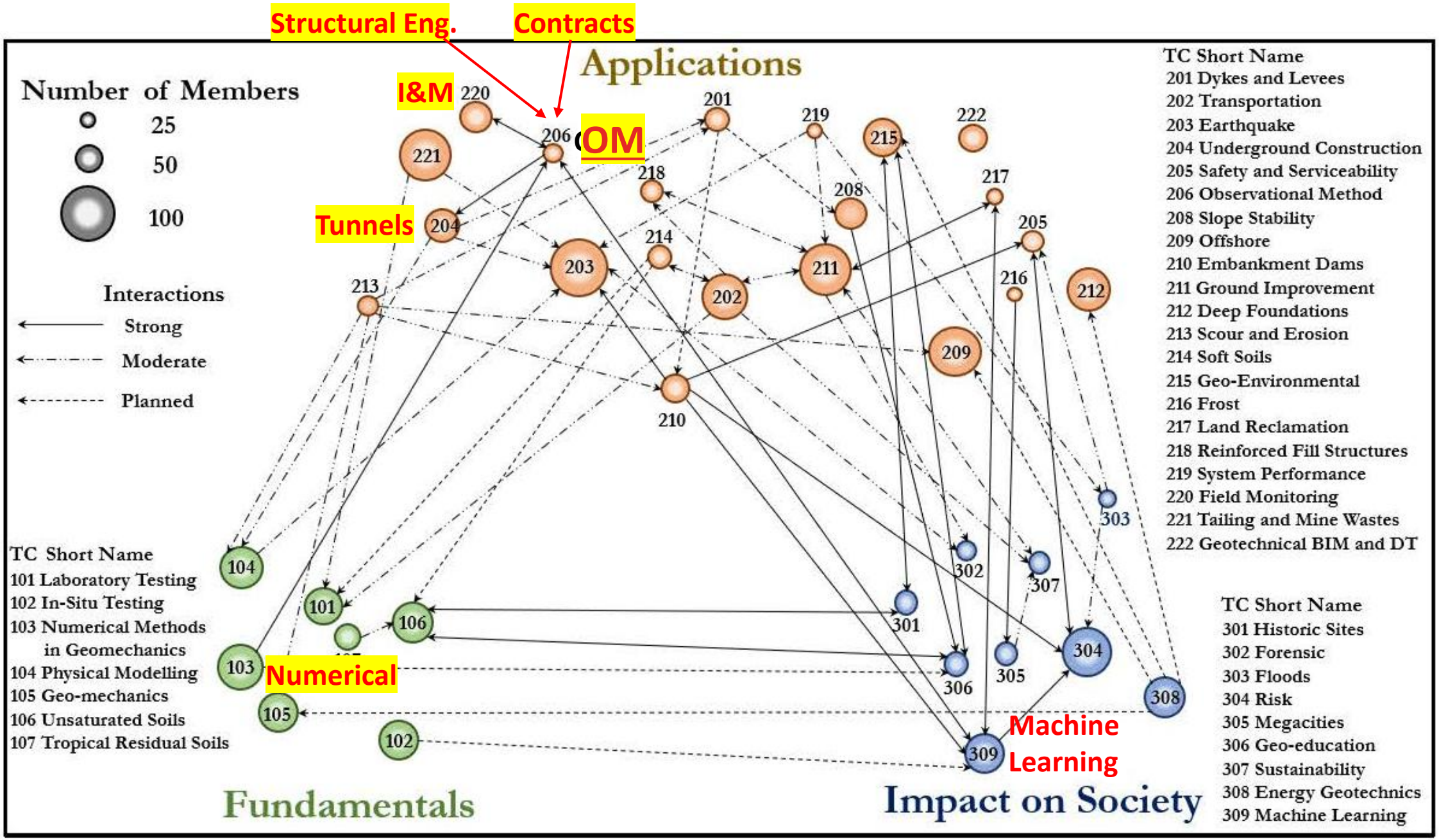
Dr. Andre P. Assis
South America

➢ Technical Committees Activities Monitoring

- ✓ Survey (online) based on questions (10 to 15)
- ✓ Two surveys per term (midterm and end).
- ✓ TC leadership teams address the questions.
- ✓ TOC processes the information and develops the corresponding outputs.

8. Did you have any interactions with other TCs? If yes, which TC?




Structural Eng.
Contracts
Applications
I&M
OM
Tunnels
Numerical
Machine Learning
Fundamentals
Impact on Society
Number of Members
25
50
100
Interactions
Strong
Moderate
Planned
TC Short Name
201 Dykes and Levees
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➢ Concluding Remarks

- ✓ **The ISSMGE Technical Committees form a global platform to advance geotechnical knowledge and practice.**
- ✓ **The Observational Method is inherently interdisciplinary and benefits from collaboration among multiple TCs.**
- ✓ **Workshops such as this one are essential to strengthen these interactions and translate research into practice.**
- ✓ **Continued collaboration among TCs will help address emerging challenges in geotechnical engineering and infrastructure resilience.**