



UFOP



Graduate Program in Civil Engineering **PROPEC**

21 YEARS

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OUTLINE

CAPES and CNPq

PROPEC

PROPEC on WEB

CHALLENGES



CAPES and CNPq

CAPES

Coordination for the Improvement of Higher Education Personnel
Ministry of Education

CNPq

National Council for Scientific and Technological Development
Ministry of Science and Technology



The MISSION

- Qualify the Brazilian university system: training human resources and developing C & T

How ?

- By implementing policies for the graduate program system
- By financing the enhancement of staff in teaching and research



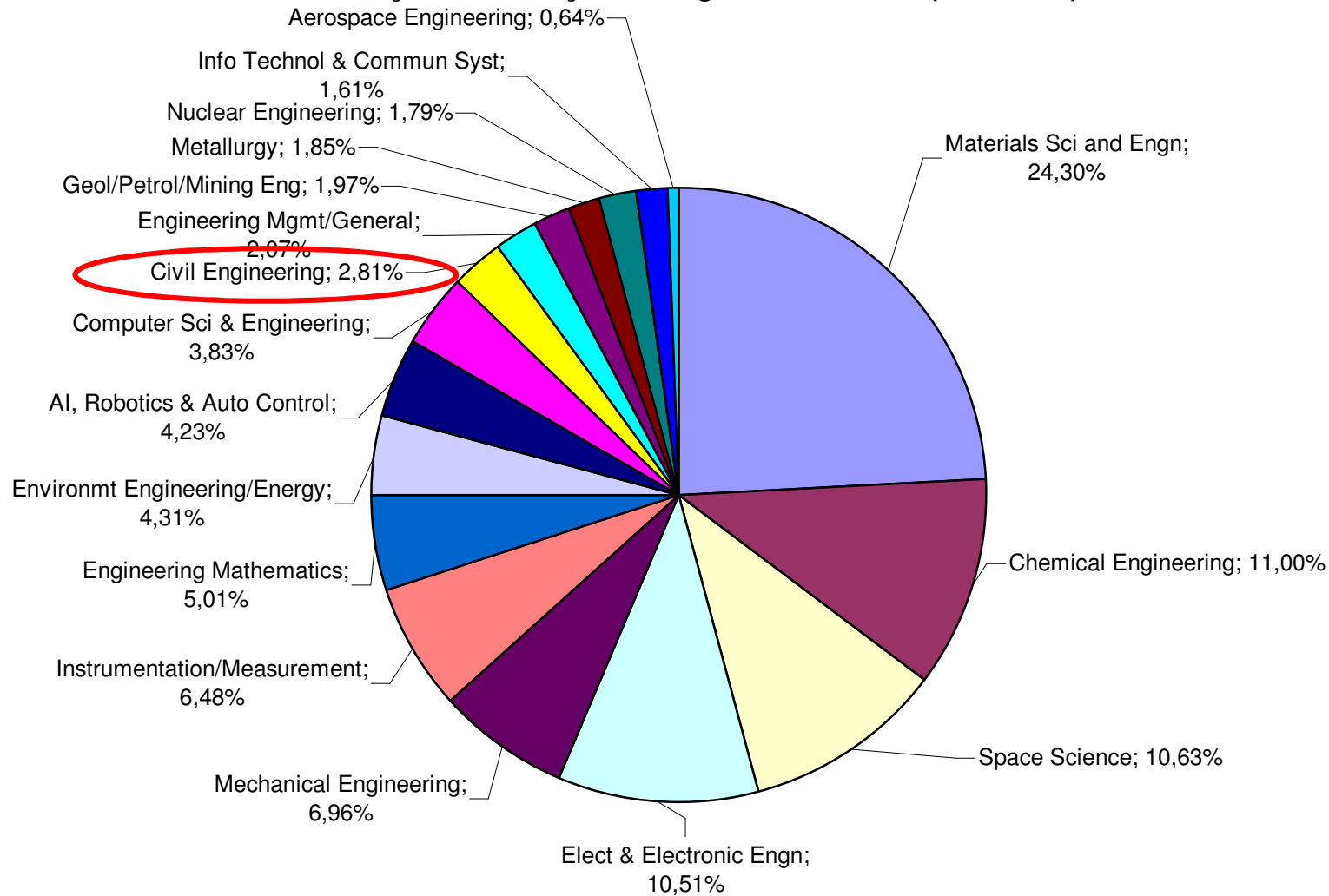
Graduate Programs in ENGINEERING... For what ???

- To train skilled professionals
- To develop and advance knowledge



CIENTIFIC PRODUCTION DISTRIBUTION (Engineering Area – Brazil)

Distribuição da Produção Bibliográfica Brasileira (2001-2005)



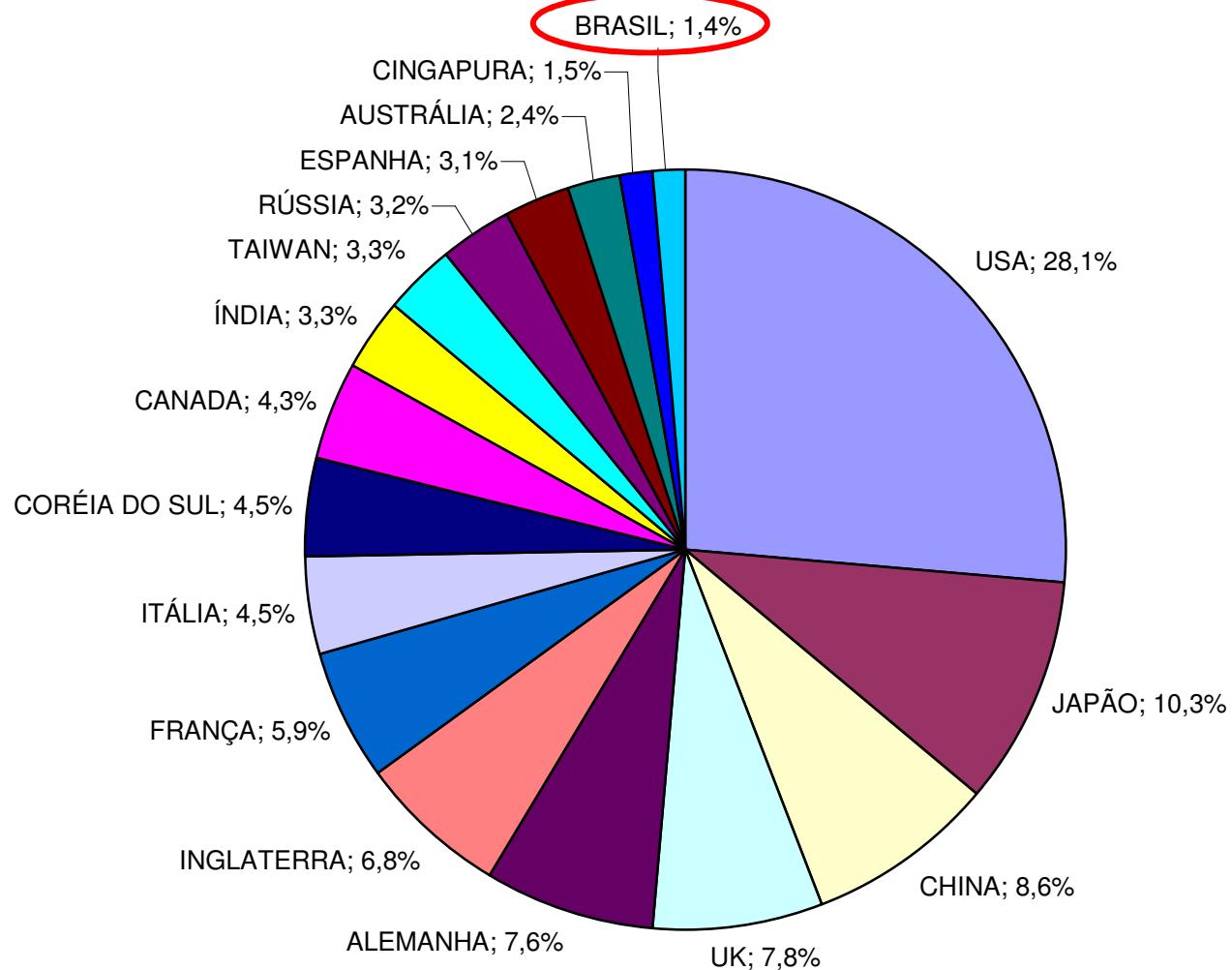


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ENGINEERING RESEARCH IN THE WORLD

Participação Mundial na Produção qualificada em Engenharias (2001-2005)





AGREEMENT POSSIBILITIES

- “Science Without Border Program”: Capes and CNPq

20/05/2013

19/08/2013

01/11/2013

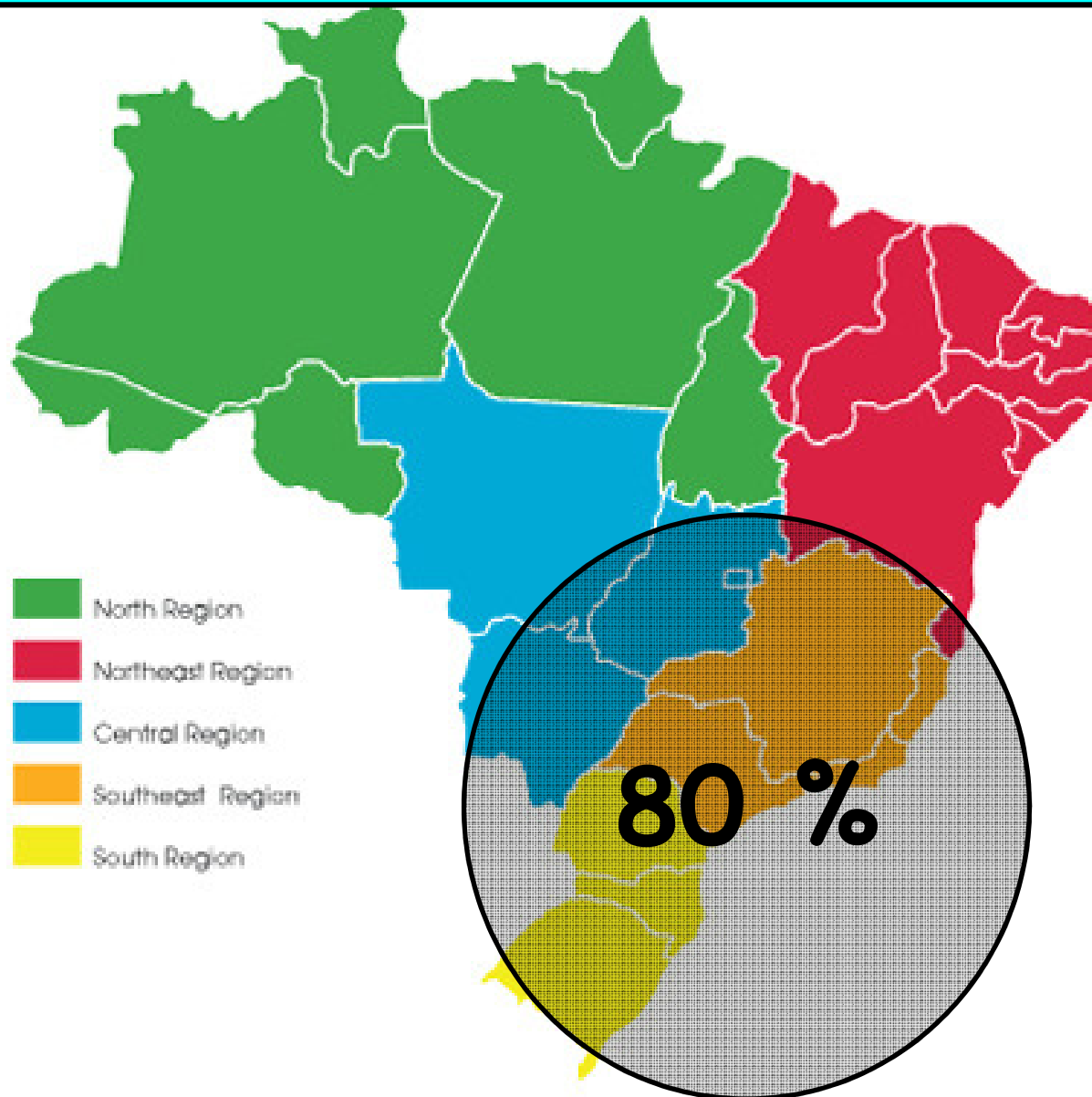


VLIR
CIUF
VLUHR

- “High Level Studies – Graduate Programs”: Capes
(Escola de Altos Estudos – Coop. Acadêmica Inter. - Nível de Pós-Graduação)
- “International Partnerships”: Fapemig
(USA, Germany, France, Italy, Canada, Sweden, England, Australia)



GRADUATE PROGRAMS IN BRAZIL





UFOP



GRADUATE PROGRAMS IN BRAZIL

Tabela 3.5-9 - Distribuição regional dos cursos de mestrado – 2009

Região	2004	2009	Crescimento (%)	Porcentagens	
				2004	2009
Sudeste	973	1.211	24,5	54,3	49,7
Sul	357	494	38,4	19,9	20,3
Nordeste	285	442	55,1	15,9	18,1
Centro-Oeste	113	177	56,6	6,3	7,3
Norte	65	112	72,3	3,6	4,6
Total	1.793	2.436	36,6	100,0	100,0

Fonte: Estatísticas da CAPES/MEC.

Tabela 3.5-11 - Distribuição regional dos cursos de doutorado - 2009

Região	2004	2009	Crescimento (%)	Porcentagens	
				2004	2009
Sudeste	691	845	22,3	65,3	59,4
Sul	186	269	44,6	17,6	18,9
Nordeste	113	193	70,8	10,7	13,6
Centro-Oeste	47	77	63,8	4,4	5,4
Norte	21	38	81,0	2,0	2,7
Brasil	1.058	1.422	34,4	100,0	100,0

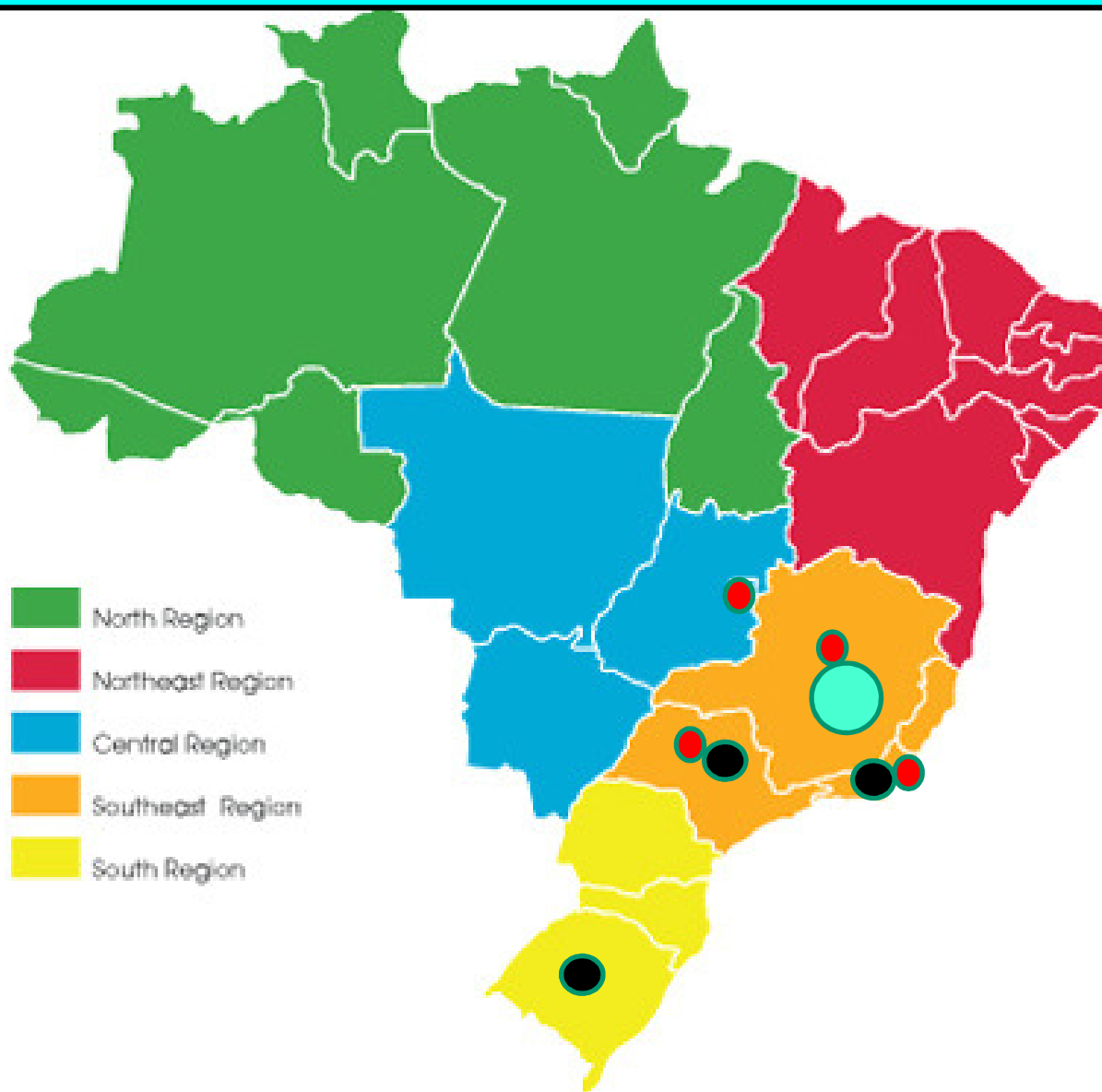
Fonte: Estatísticas da CAPES/MEC.



THE BEST GRADUATE PROGRAMS – CIVIL ENG.

Grade 7: ○
UFRJ
FRGS
USP (SC)

Grade 6: ●
PUC-Rio
UFMG
USP (SC)
UnB



Grade 5:
UFOP



MINAS GERAIS STATE



Mine



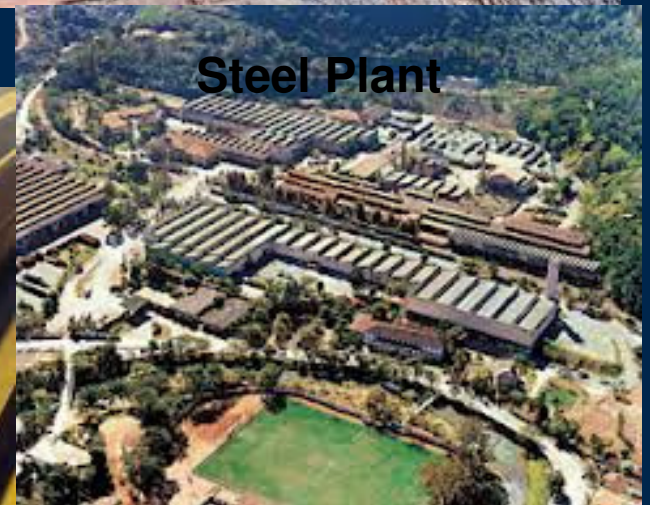
Transportation



Buldings



Profiles



Steel Plant



PROPEC

Graduate Program in Civil Engineering
Department of Civil Engineering
School of Mines
Federal University of Ouro Preto

PROPEC

Grade 5 (CAPES)

The best program in Civil Engineering in
Minas Gerais State

One of the best of Brasil !!



1. HISTORICAL



- 1982-1991: CEEM & CETUA
- 1992: Master Course (Steel Const.)
(1º in Brazil)
- 2005: PhD Course



2. PROPOSAL



UFOP



- Develop qualified human resources
- Develop leading edge research
(new methods, new construction systems
and projects in steel and composite structures)
- Meet market demand
(Professional: area of structures and construction)
- Promote the use of steel (and composite structures;
industrialization of construction)



3. FACULTY



PERMANENT PROFESSORS : 9

COLLABORATING PROFESSORS : 3

- Andréa R.D. Silva
- Arlene M.S. Freitas
- Ernani C. Araújo (C)
- Francisco Célio de Araújo (**GENERAL Coordinator**)
- Francisco A. Neves
- Henor A. Souza (**AREA Coordinator**)
- Geraldo D. Paula (C)
- João Batista M. Sousa Jr.
- Luiz Fernando L. Ribeiro (C)
- Marcílio S.R. Freitas
- Ricardo A.M. Silveira
- Ricardo A.F. Peixoto



4. RESEARCH LINES

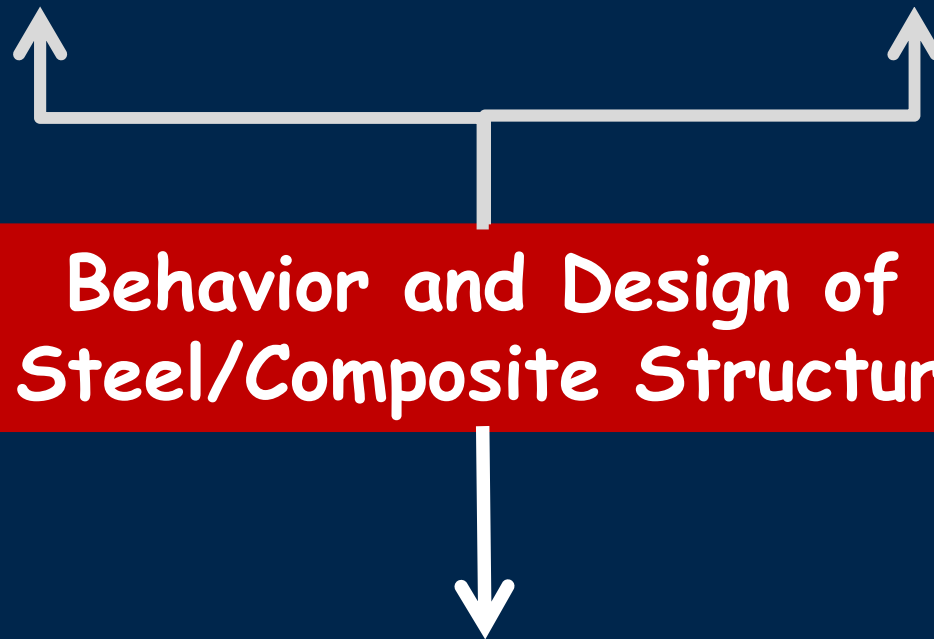


**Computational
Mechanics**

**Structural and Material
Engineering**

**Behavior and Design of
Steel/Composite Structures**

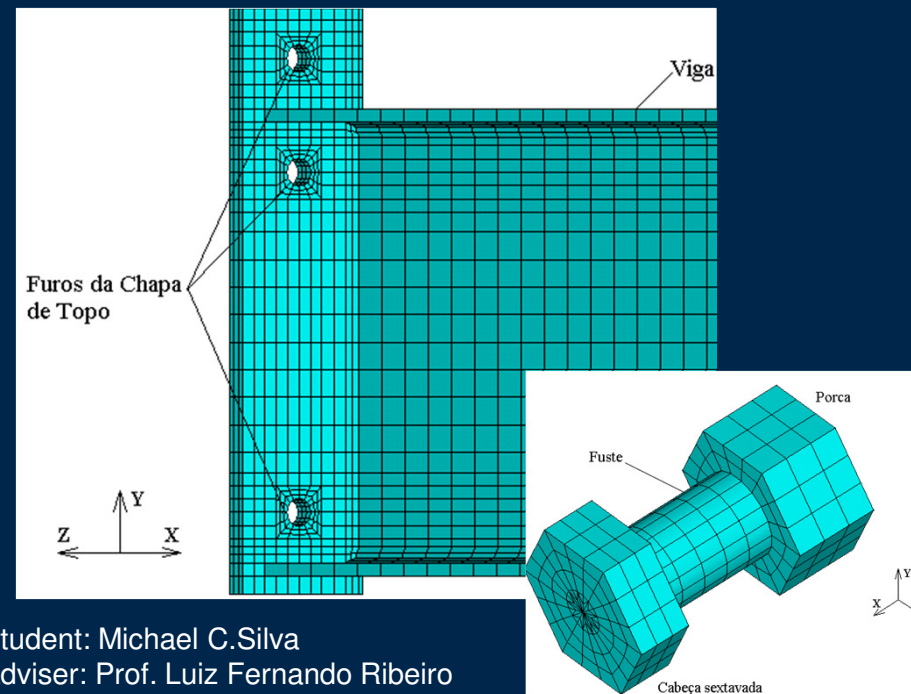
**Architecture and
the Built Environment**



Behavior and Design of Steel/Composite Structures

OBJECTIVE

Developing research for the analysis and design of structural systems (steel, concrete and mixed; theoretical, numerical and experimental)

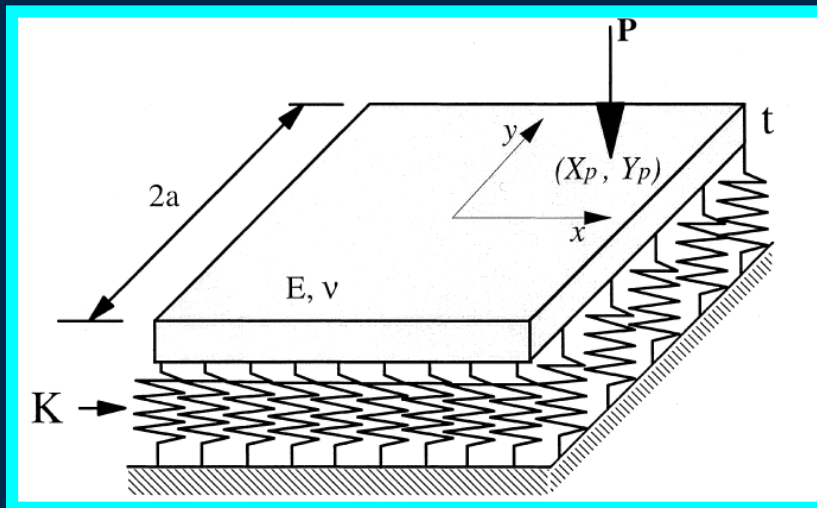


Student: Michael C.Silva
Adviser: Prof. Luiz Fernando Ribeiro

Computational Mechanics

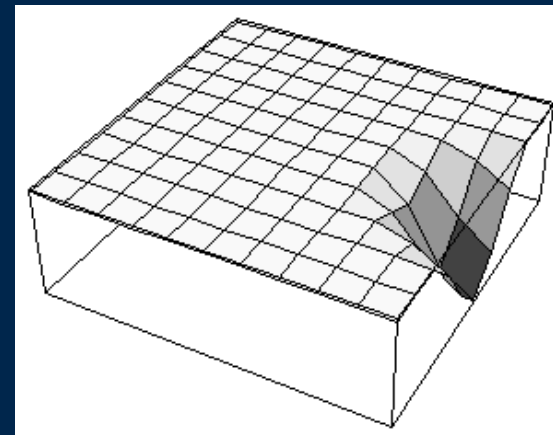
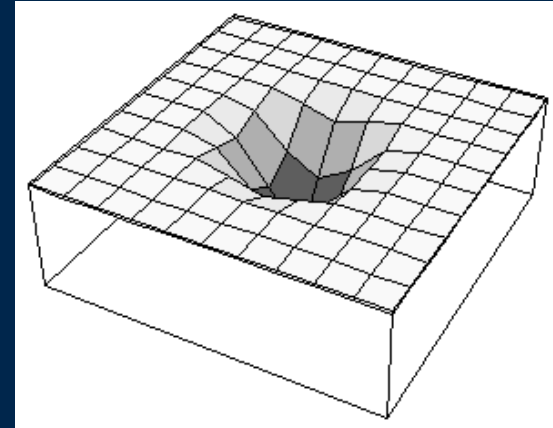
OBJECTIVE

Developing research for numerical analysis and computer simulation of structural systems



Student: Andréa Silva
Adviser: Prof. Ricardo Silveira

Silva et al., IJSS, 2001.





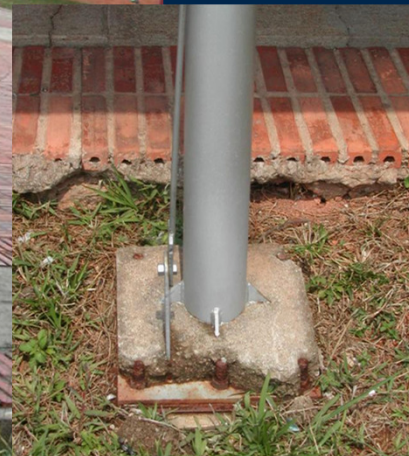
Structural and Material Engineering

OBJECTIVE

Developing innovative solutions and improvement of existing methods



Student: Rovadávia Ribas
Adviser: Prof. Henor Souza





Architecture and the Built Environment

OBJECTIVE

Develop research aimed to propose architectural solutions for steel and composite buildings

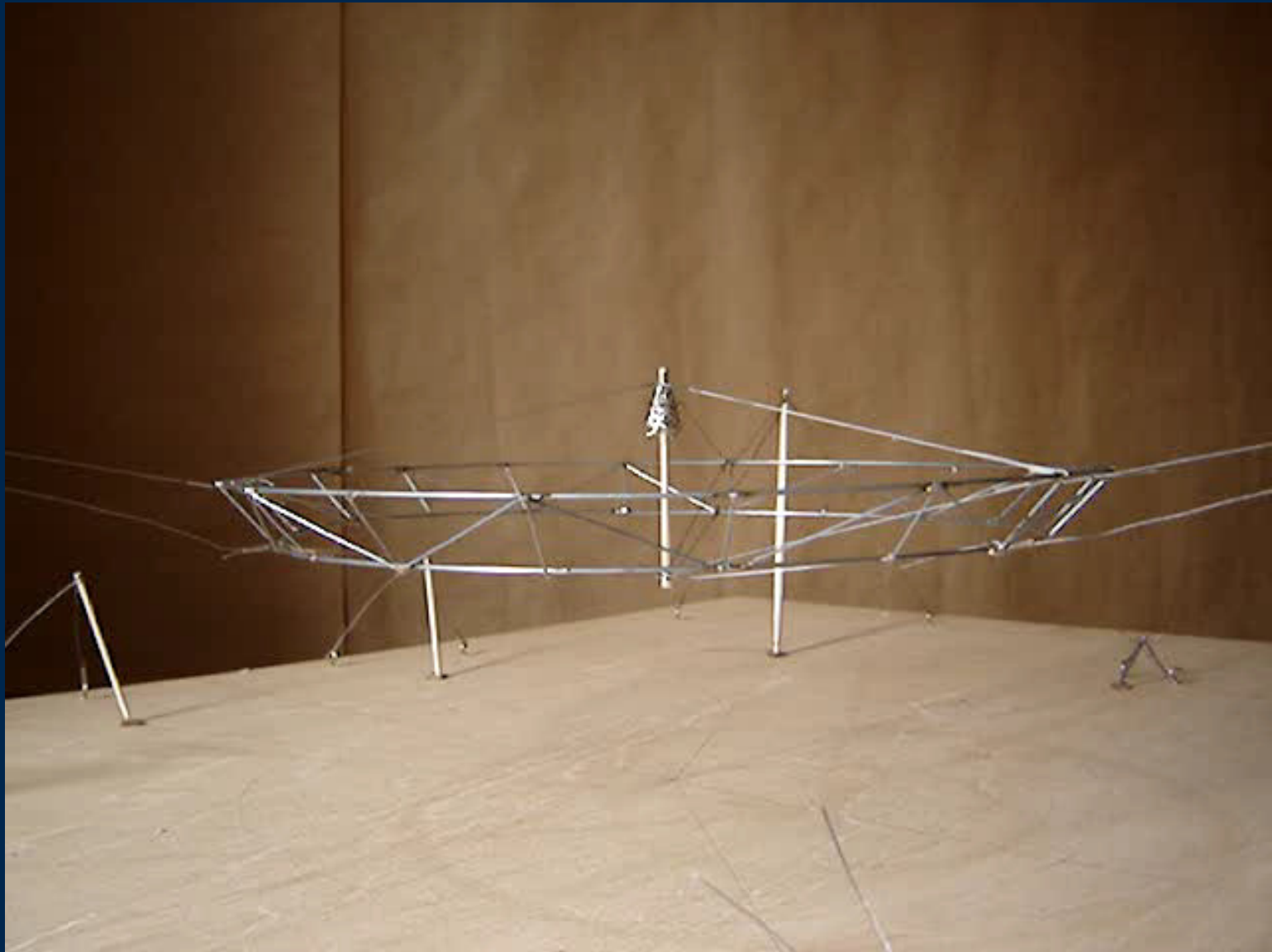


TENSOESTRUTURAS: ELEMENTOS E CABOS METÁLICOS ASSOCIADOS A MEMBRANAS

Student: Eliana Nunes . Adviser: Prof. João Batista Sousa Jr.



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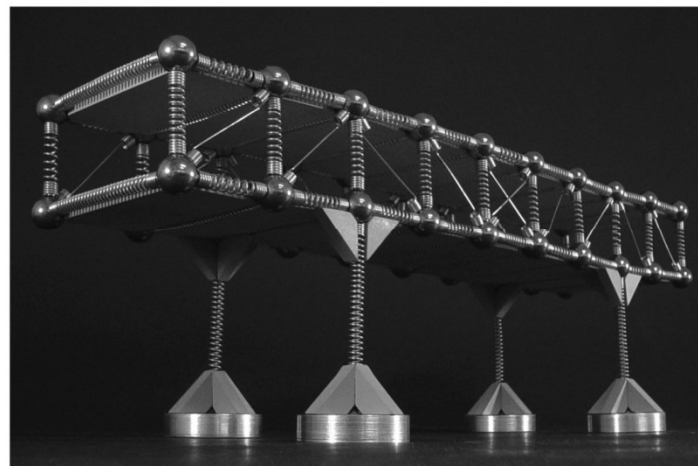


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Tribunal de Contas da União do Estado de Alagoas, Maceió.

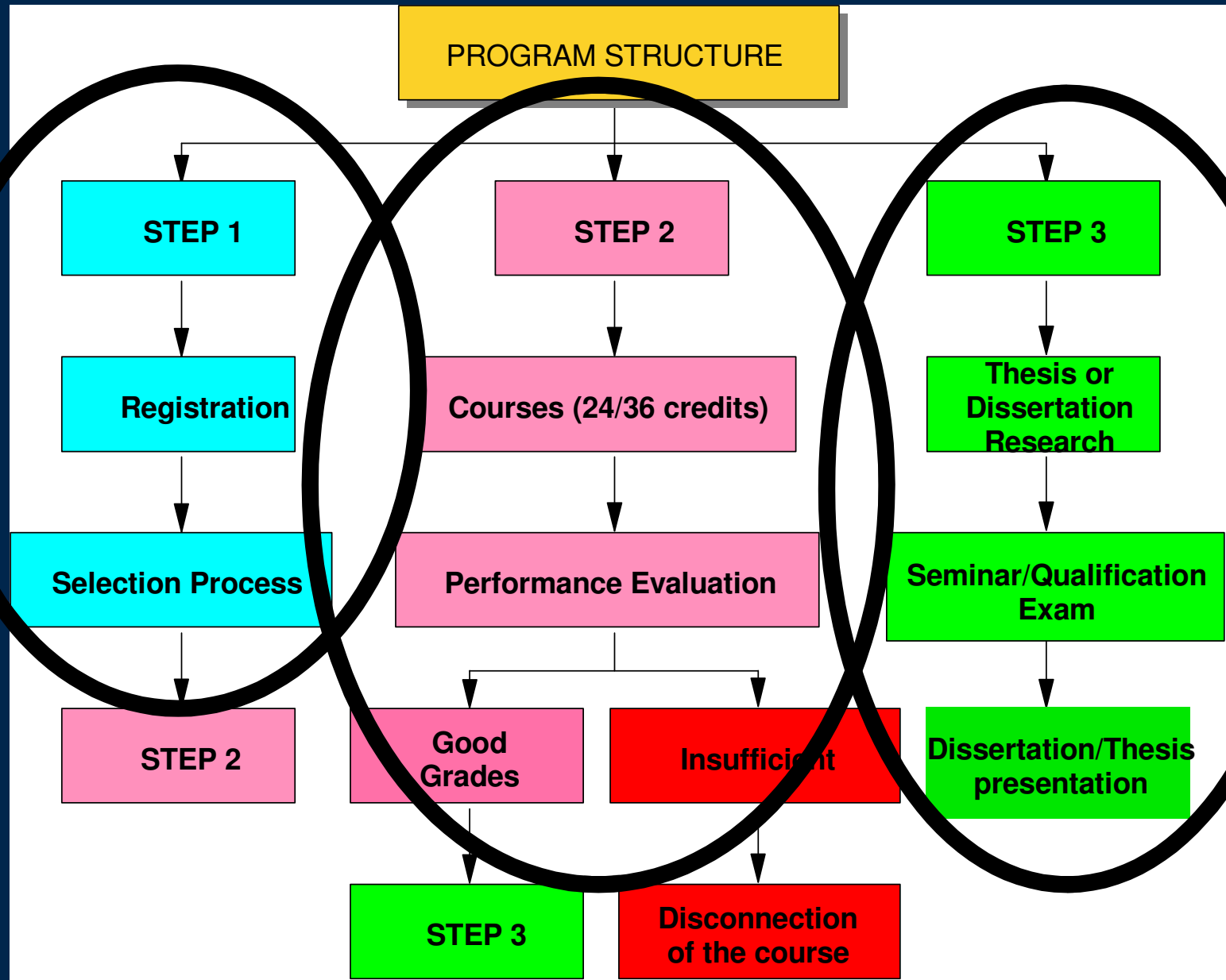
Student: Márcio Sequeira de Oliveira
Adviser: Prof. Arlene Freitas



Student: Márcio Sequeira de Oliveira
Adviser: Prof. Arlene Freitas



5. PROGRAM STRUCTURE





6. FACILITIES



- **Experimental Laboratory (Altamiro Tibiriçá Dias)**
- **Computacional Laboratories (LAMEC, LCC)**
- Environmental Comfort Laboratory
- Structural Dynamics Laboratory
- Laboratories of Metallurgy – DEMET



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School of Mines





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Experimental Laboratory





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Computacional Laboratories



Computacional Laboratory
(LCC)

Computacional Laboratory (LAMEC)





7. AGREEMENTS



COMPANIES

- Gerdau Açominas (CEEM & CETUA)
- Usiminas (1992)
- V&M (2001)
- Medabil, ASCOM
- ArcelorMittal Brasil

AGENCIES AND UNIVERSITIES

- CAPES, CNPq and FAPEMIG
- UFES, UFRJ, PUC-Rio, USP
- ULB, IST, UTexas-Austin, Oak-Ridge NL



8. IMPACTS and OUTCOMES



UFOP

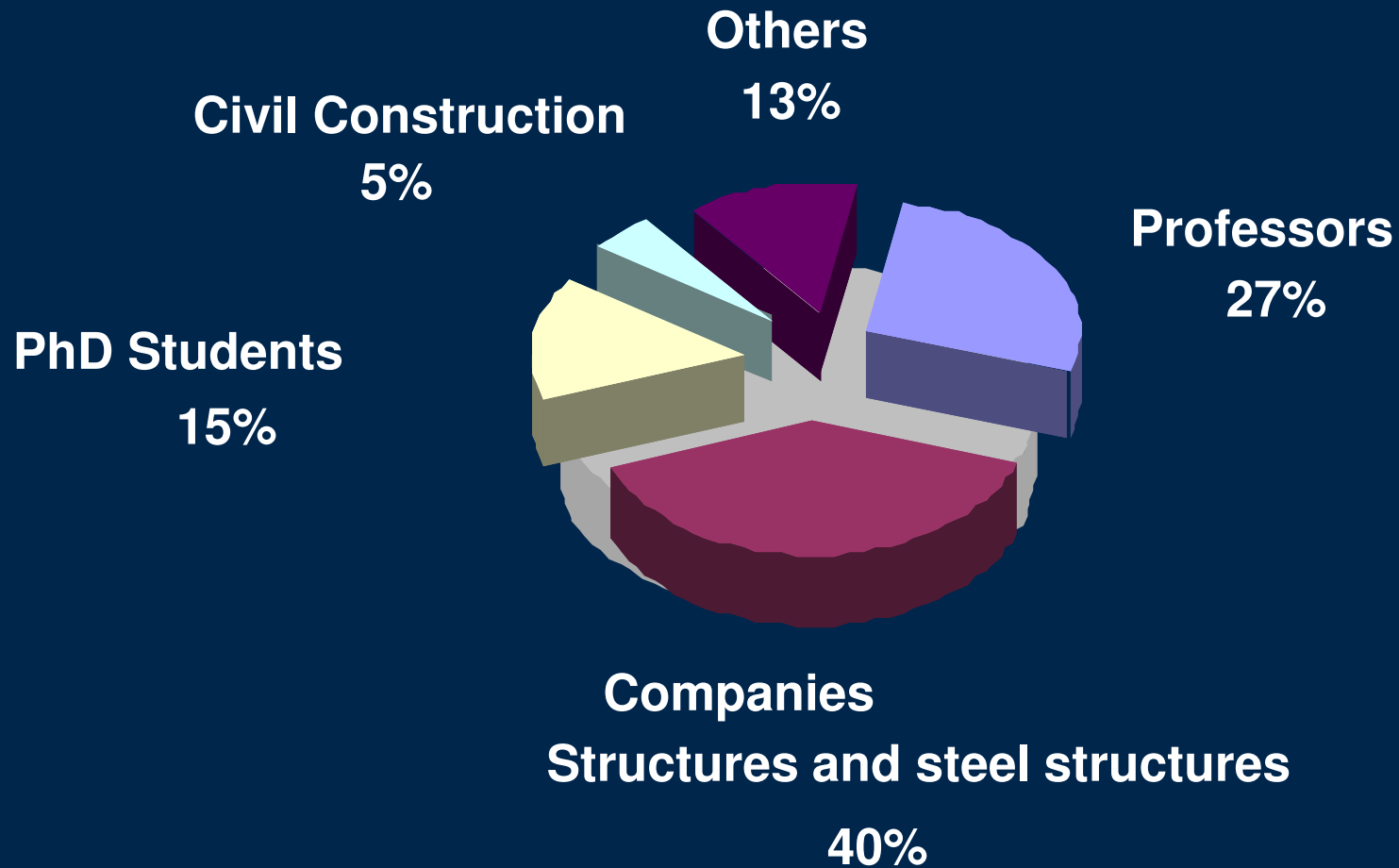


- Multip...
- Develo...
- Events (International...





Former Students





PROPEC on WEB

www.propec.ufop.br

ENGLISH VERSION



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PROPEC
PROGRAMA DE PÓS-GRADUAÇÃO EM
ENGENHARIA CIVIL

Crédito: Eliana Nunes | Orientador: Professor João Batista M. Sousa Jr.



THE PROPEC ▶

STEEL CONSTRUCTION

RESEARCH LINES

FACULTY ▶

CURRENT STUDENTS ▶

DISSERTATIONS AND THESIS

LABORATORIES

COURSES

PARTNERS

APPLICATION AND SELECTION

DOWNLOADS

LINKS



Foto: Antônio Lata

NEWS



Veja o Calendário 2013 do PROPEC

Veja o novo calendário do PROPEC para 2013. Utilize o item "Download" para baixá-lo ou clique aqui....

ABOUT PROPEC



Em breve...



CHALLENGES



• Grade 5 → 6 → 7



• Involvement of Professors and Students

• International Cooperation

• Cientific Production



UFOP



OURO PRETO PICTURES























Acknowledgments

Thierry, Peter and Cláudio



PROPEC
Programa de Pós-Graduação
em Engenharia Civil



PROPEC

Merci !!

