



SOCIETY OF ECONOMIC GEOLOGISTS, INC.

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Student Chapter Annual Report Form

This form is used to report on Student Chapter activities over the previous year. The report provides a useful medium to document the status and progress of individual chapters. Annual Reports are used to evaluate applications for SEG support and to keep information up-to-date on the SEG website. Please provide a summary of chapter activities in a concise form as suggested below. Description of programs may be supported by a limited number of photographs and figures in a format appropriate for publishing on our website.

Submission Deadline: September 30th

Submit to: studentprograms@segweb.org

Month/Year Reported: From 10/2017 (mm/yyyy) – To 09/2018 (mm/yyyy)

Chapter Name: Brasília Student Chapter - BRASC

Chapter Mailing Address: Instituto de Geociências, Universidade de Brasília, Campus Darcy Ribeiro, Brasília - DF

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Chapter Website: <https://sites.google.com/view/segunb>

Chapter Facebook: <https://www.facebook.com/segunbsc/>

Chapter Executive Committee (*in office during the time frame captured on this report*) (type "Vacant" if position not filled):

President:	<u>Brunno Abilio Ciriaco Araujo</u> Name	<u>brunno_abilio@hotmail.com</u> E-mail
Vice President:	<u>Hygor Viana de Godoy</u> Name	<u>hygorv@gmail.com</u> E-mail
Secretary:	<u>Larissa Vieira Valadão</u> Name	<u>valadao.larissa@gmail.com</u> E-mail
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Chapter Academic Sponsor (*SEG Fellow membership in good standing*):

<u>Cesar Fonseca Ferreira Filho</u> Name	<u>cesarf@unb.br</u> E-mail	<u>5561 31076786</u> Phone
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Chapter Industry Sponsor (*SEG Fellow membership in good standing and not affiliated with the student chapter's institution*):

<u>Jonas Mota e Silva</u> Name	<u>jonas.silva@nexaresources.com</u> E-mail	<u></u> Phone
<u></u> Address		<u></u> Fax

Sponsoring Institution or Company (name): Nexa Resources

- Attach:**
1. a list of names of **all** Student Chapter members (please indicate by * if SEG Student Member).
 2. complete Student Chapter Membership Information form with the current Executive Committee listed on page 1.

On a separate page(s) provide a summary of student chapter annual activities:

1. Regular meetings, lectures
2. Field trips (dates, area visited, field trip leaders, number of participants, sponsors, benefits for students).
Note: this is not the place for a detailed field trip report that is required from a chapter who has received funding from the Stewart R. Wallace Fund.
3. If your chapter received funding from the Stewart R. Wallace Fund, please submit a separate actual accounting of how chapter funds were spent/used.
4. Organization of conferences, workshops, short courses (theme, number of participants, benefits for students)
5. Participation in conferences, workshops, short courses (theme, number of participants from the chapter, benefits for students)
6. Fund-raising programs
7. Other programs
8. Future plans

Roberto de Siqueira Corrêa*
Larissa Vieira Valadão*
Hygor Viana de Godoy*
Luiz Fernando Cursino Tabosa
Filipe Silva Machado
Yago Santos de Lira*
Brunno Abilio Ciriaco Araujo*
Amanda Caroline do Nascimento da Silva
Caio Bussaglia Ressa*
Lucas Teles Meneses
Aline Alves Dos Santos
Beatriz Dantas Rabelo de Almeida
Monique dos Santos Costa
Fabio Osorio de Oliveira
Raylline Ferreira da Silva
Gabriela Silva Ferreira
Gabriel Coutinho Farias
Beatriz Alves de Matos
Victor Boaventura de Jesus
Priscila Trifiletti Crespo
Larisse Ferreira da Silva
Marina Dalla Costa
Caliméria Beatriz Santana Passos do Carmo
Ana Laura de Mello Rodrigues
Verônica Pereira de Brito
Luiza Motta Campello
Wendell Fabrício da Silva*

Introduction

The Brasília Student Chapter (BRASC) was founded in April 2011 in the University of Brasília (UnB). Since then, the academic advisor is Prof. Dr. Cesar Ferreira Filho. From the end of 2017 until May 2018 the chapter went through an internal restructuring, but it did not interfere with the chapter's regular activities. The chapter's new executive committee of is excited about the new setting and the increasing number of undergraduate students interested in participating in the chapter's activities.

Summary of student chapter activities

Regular meetings are held every two weeks. In these occasions future activities are proposed, such as discussing subjects related to Economic Geology (e.g. deposit classes) and planning speeches. The other activities performed by chapter members will be listed below.

Regular meetings and lectures

The new executive committee proposed to hold lectures whose subjects are related to a specific type of mineralization / metallogenesis, to be taught by graduate students conducting research in this area and by professors of the Geosciences Institute of the University of Brasília (UnB). In addition, lecturers from the Brazilian Geological Survey (CPRM) and the National Mining Agency / National Department of Mineral Production (ANM / DNPM) were also invited.

Tabela 1. Schedule activities

Date (mm/dd/yyyy)	Lecturer	Theme
08/29/2018	Marina Marques Dalla Costa (DNPM)	The Brazillian Mineral Sector
09/12/2018	Wendell Fabrício (PhD student)	The geologist and the mining companies
10/03/2018	Claudia Augustin (PhD student)	The importance of metamorphism and deformation for the mineralization of nickel and copper sulphide in the Mangabal Complex
10/17/2018	Cesar Fonseca Ferreira Filho (Chapter Academic Sponsor)	Ni-Cu-PGE- sulphide deposits
10/31/2018	Thiers (DNPM)	Cana-Brava mafic-ultramafic complex

Field Trips

Through contacts made by the current president of the chapter (Brunno Abílio) with professionals from the company Five Star Diamonds, the chapter arranged a 2-day field excursion from August 2nd to 3rd. The group had logistical support from the Geosciences Institute of UnB, but each student paid for his/her own costs during the trip to the region of Catalão (GO).

Since there are various research projects currently under development in primary bodies, there is a great potential for expanding the production of this commodity. Thus, in order to present chapter members to these new trends in Brazilian diamond production, BRASC organized a tour to the Five Star Diamonds project in the municipality of Ouvidor in Goiás.

The visit was guided by the geologists Paulo Ilidio and Otto Vaz and, among the activities, the geological array of the Alto Parnaíba Alkaline Province - where the Catalão Diamond Project kimberlite pipes are located - was introduced to the students. During the tour it was possible to visit the outcrops of the kimberlite pipe, and the group also had access to diamond drill core samples, as well as the drilling operation in progress. In addition, the group was introduced to the experimental plant, where they learned about the various stages of diamond extraction.



Figure 1. BRASC members and professionals of Five Star Diamond in the field trip to Catalão - GO.

Participation in Events

Event in Celebration of the 50 Years of the Carajás Province Discovery

On November 9th and 10th, 2017, a 50-year celebration of Carajás discovery workshop was held and organized by the Pre-Cambrian Metallogeneses Research Group with support from members of the previous executive committee of BRASC.

Organização: Grupo de Pesquisa em Metalogênese do Pré-Cambriano	09 e 10 Novembro 2017	WORKSHOP 50 anos de Carajás Da descoberta à atualidade	IG/UnB
   	QUINTA-FEIRA (09/11) no Auditório da Geocrono	SEXTA-FEIRA (10/11) no Auditório do IG	
08 as 12H00 Bate-papo científico 1 Geofísica aplicada à Mineração Profa. Dra. Roberta Vidotti (UnB)	08H00 Atuação do Grupo de Pesquisa Metalogênese do Pré-Cambriano em Carajás Profa. Dra. Emilia Della Giustina (UnB) e Prof. Dr. Claudinei Oliveira (UnB)	14H00 Serra Pelada, Ouro Preto e Cretáceo Tardio Prof. Dr. Alexandre Cabral (UFMG)	
12H00 Almoço	08H30 Carajás: Um caso histórico Breno dos Santos (Consultor)	15H00 A aerogeofísica de Carajás pelo Serviço Geológico do Brasil Iago Costa (CPRM)	
14 as 18H00 Bate-papo científico 2 O Cinturão Platinífero de Au-Pd das Minas Gerais: Algumas Ideias Aplicadas Prof. Dr. Alexandre Cabral (UFMG)	10H00 Os depósitos de Minério de Ferro de Carajás Filipe Scofano Maia Porto (VALE)	15H30 O Depósito IOCG GT-34 Victor Garcia (UnB)	
Realização:  	11H00 Mesa redonda Todos os palestrantes	16H30 Carajás: As dúvidas que ainda permanecem Noevaldo Teixeira (CPRM)	
	12H00 Almoço	18H00 Happy Hour	

Figure 2. The 50 years of Carajás event programme

The workshop included presentations related to Economic Geology and Mineral Exploration. Among the lecturers, there were professors from the University of Brasília (UnB) and from the Federal University of Minas Gerais (UFMG), as well as lecturers from the Brazilian Geological Survey (CPRM) and the mining company Vale. There was also a presentation of the Masters student Victor Garcia (which was also a chapter member at the time) on the deposit of IOCG GT-34 in Carajás.



Figure 3. Lecture by the geologist who participated in the discovery of Carajás, Breno Augusto dos Santos.



Figura 4. Professors of UnB Maria Emília Schutesky della Giustina (at left) and Roberta Mary Vidotti (at right) who were responsible for organizing the event along with BRASC with the lecturer Breno.

1st Economic Geology National Meeting - I ENAGE

Roberto de Siqueira Corrêa and Hygor Viana, members from the UnB SEG Student Chapter (BRASC) were part of the organizing committee of the “1st Economic Geology National Meeting” (I ENAGE, in Portuguese), held on May 19th and 20th in Ouro Preto – Minas Gerais state, Brazil which was a complete successful event.

The I ENAGE is the result of a partnership between the 10 Brazilian SEG Student Chapters and ADIMB (Brazilian Agency for Technological Development of the Brazilian Mineral Industry). Its main goal is to develop, expand and disseminate knowledge concerning the field of Economic Geology. Furthermore, the event was conceived to connect and strengthen the link between academia (students, professors and researchers) and mining company professionals, with lectures and posters presentations from exponents from both sides.

The event featured prominent speakers such as Douglas Kirwin (president elected 2018 SEG) and Jeremy Richards (Laurentian University), as well as several other industry geologists and students working in economic geology.



Figura 5. Logo of the I ENAGE and Student Chapters responsible for organizing the event.

Tabela 2 | ENAGE event schedule.

Programação do Evento			
Sábado		Domingo	
7:00 - 8:30	Inscrições*	8:00 - 8:40	Palestra a definir
8:30 - 9:00	Abertura do evento		
9:00 - 09:40	Palestra Douglas Kirwin (President Elect SEG 2018) - Palestra: <i>"The Business of Mineral Exploration"</i>	8:40 - 09:00	B1020 - Reconhecimento de alvos potencialmente mineralizados a Ouro em rochas hidrotermalmente alteradas, utilizando imagens ASTER, na região centro-sul do Rio Grande do Sul, Brasil. Autores: Lucas do Espírito Santo , Seoane, J.C.S.
		09:00 - 09:20	B3021 - Gold Mineralization Associated to the Moncorvo Iron Deposit (Portugal): Evidence of Late Hydrothermal Alteration on the South Limb of Moncorvo Synclinorium. Autores: Emílio Urbano , Carlos Meireles, Maria Elisa Gomes, Nuno Figueiredo
		09:20 - 09:40	B3037 - Structural control of the gold mineralization in the Peixoto de Azevedo-Flor da Serra region, Alta Floresta Gold Province, Amazonas craton. Autores: Rafael V. Teixeira; Mesquita, M.J.; Xavier, R.; Ducart, D.; Assis, R.; Matos, J.; Trevisan, V.; Novo, Y.; Quispe, P.; Pimenta, V.; Moreira, T.; Nogueira, T.; Poggi, L.
		09:40- 10:00	B3028 - Caracterização da mineralização aurífera do depósito Mangaba - novo corpo aurífero hospedado na estrutura IV do Greenstone Belt de Crixás, Goiás. Autores: Renan G. Souza; Frantz, J.C.; Marques, J.C.; Santos, B.A.; Castoldi, M.A.S.; Trindade A.C.C.; Campos M.P.; Cadaxa, L.H.
09:40 - 10:40	Coffee break e apresentação de banners	10:00 - 11:00	Coffee break e apresentação de banners
10:40 - 11:00	B1030 - Avaliação da distribuição dos elementos deletérios no depósito de magnesita do Torto/CE via modelamento geológico tridimensional. Autores: Ronaldo Pereira da Silva Filho; Vinicius Araújo Alho ; Gabriel Valentim Berni; Clóvis Vaz Parente.	11:00 - 11:20	B3022 - Comparações micro-morfológicas do ouro dos depósitos do tipo paleoplacer modificados similares ao Witwatersrand, Black Reef e Jacobina com ocorrências de ouro da Formação Moeda, Sinclinal Ouro Fino, Quadrilátero Ferrífero, MG. Autores: Rafael da Silva Madureira , Glaucia Nascimento Queiroga, Cristiano de Carvalho Lana, Maximiliano Martins, Ana Ramalho Alkmim, Débora Vasconcelos de Oliveira, Edison Tazava, Marco Paulo de Castro.

Programação do Evento			
Sábado		Domingo	
11:00 - 11:20	B3016 - Os Halos Ca-Ba e K da Província Scheelitífera do Seridó, Domínio Rio Grande do Norte, Província Borborema, Brasil. Autores: Roberto de Siqueira Corrêa , Claudinei Gouveia de Oliveira.	11:20 - 11:40	B3039 - Depósito Au-Cu Luiz Bastos, Província Mineral de Alta Floresta: evidências de alteração hidrotermal de alta temperatura
11:20 - 12:00	Palestra Filipe Porto (VALE) <i>Depósitos de minério de ferro, Carajás: Gênese e recursos</i>	11:40 - 13:00	Palestra Jeremy Richards (Laurentian University, CA) <i>Tectonomagmatic controls on arc metallogeny</i>
12:00 - 13:20	Almoço	13:00 - 13:30	Encerramento do evento
13:20 - 14:00	Palestra Jonas Mota (NEXA Resources) <i>Exploração mineral na Nexa Resources: uma empresa focada em Zinco e Cobre no Brasil e no Peru</i>		
14:00 - 15:20	B2040 - Inclusões minerais em cromita da Camada de Cromitito Principal como novas evidências de contaminação crustal para o Complexo Jacurici, BA. Autores: Betina M. Friedrich ; Marques, J.C.; Olivo, G., Joy, B., Frantz, J.C.		
14:20 - 14:40	B3003 - O Depósito de Manganês portador de Metais Raros (Cobalto, Tálcio e Escândio) de alto teor do Vau da Boa Esperança, Região de Barreiras, Oeste da Bahia, Brasil. Autores: Clayton R. Janoni ; Barbosa, J. S. F.		
14:40 - 15:00	B2036 - Atributos geológicos do depósito de Cu-Co Tarzan, Província Carajás, e comparação com sistemas do tipo VMS e de Cu-(Co) estratiforme hospedado em rochas sedimentares. Autores: Rafaela Santeiro C. Pinheiro ; Moreto, C.P.N.; Xavier, R.P.		
15:00 - 15:20	B3005 - Análise estrutural dos veios de metais raros (Tálcio, Cobalto, Escândio) associados ao Distrito Manganêsífero do Oeste da Bahia, na região de Barreiras/BA. Autores: João. Paulo A. Gama ; Janoni, C. R.; Barbosa, J. S. F.; Santos Filho, J. E. A.		
15:20 - 15:40	B2016 - O depósito polimetálico (Sn, W ± Zn, Pb E Cu) em greisens de São Lourenço – Macisa (Ro). SW do Cráton Amazônico: petrologia e litogeoquímica do plúton granítico associado à mineralização. Autores: Vanderlei Farias ; Ferraz, R.S.F.G; Ciotta, M. R; Leite Júnior, W.B; Bettencourt, J.S.		
15:40 - 16:40	Coffee break e apresentação de banners		
16:40 - 17:40	Palestra Lena Monteiro (IGc - USP) <i>Evolução dos depósitos de óxido de ferro-cobre-ouro da Província Carajás</i>		



Figura 6. Members of the organizing committee and participants of the I ENAGE.

Future plans:

The plans for 2018/2019 include:

- **Funding Measures:** We are currently studying the best procedures to capitalize our chapter. Apart from the Stewart R. Wallace Fund, we're planning to look for sponsorship from some mining companies and to sell some souvenirs from our chapter. and the possibility of establishing a link with the geology junior company of the geosciences institute for fundraising
- We are planning a field trip together with SC UNICAMP members to visit famous gold mines in the state of Goiás.
- To continue with the lectures concerning styles of mineralization taught by students and professors over the next months, to foster and stimulate the communication and dissemination of knowledge among the most experienced students and the new chapter members.