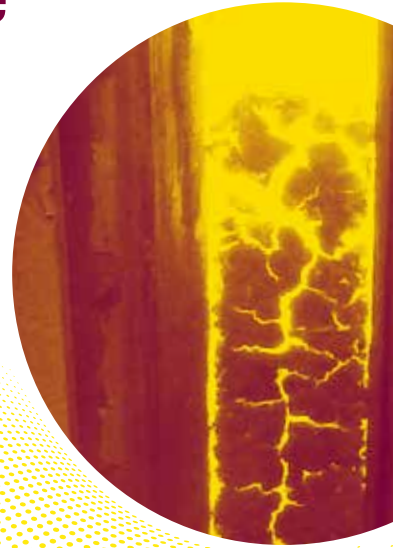


Sponsors



10th Cokemaking Course



Organizing Committee

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www.eng.mcmaster.ca/training-courses

May 12 - 17, 2019

McMaster University,
Hamilton, Ontario, Canada

www.eng.mcmaster.ca/training-courses

**BRIGHTER
WORLD**



ENGINEERING

Course Objectives

Cokemaking has evolved into a very efficient and sophisticated process. Cokemaking is one of the most important operations in the steel industry because it is the key to energy consumption in the plant and has a major influence on the operation of the blast furnace. Proper control and maintenance of the coke plant may offer solutions to many of the environmental problems associated with steel production.

2019 Lectures

Introduction & Fundamentals

The History of Cokemaking

**Fundamentals of Coal and
Coke Characterization**

Coke Oven Game (*Computer Game*)

Coke in the Blast Furnace

Theory of Carbonization

**Environmental Issues Facing the Coking
Industry into the 21st Century**

Coal Mining and Preparation

Coal from Ground to Coke Plant

**Design of Coal Blend for
Required Coke Properties**

Equipment and Operations

Principles of Coke Oven Design

**Non-Recovery Cokemaking
Fundamentals and Principles**

The course will present “state-of-the-art” knowledge of the entire coke plant at a level that will be useful to operators, researchers and suppliers to the industry. While the focus of the course will be primarily on coke for blast furnaces, some consideration will be given to coke for other uses. The material presented and the structure of the course is continuously updated by a team of international experts.

Non-Recovery Cokemaking Case Studies

Control of Battery Heating

Recovery Cokemaking Case Study

Coke Oven Energy Balance and Recovery

Machinery Design and Automation

Prolonging Asset Life

By-Products

Introduction to the By-Product Plant

**Removal of Sulphur and Ammonia
from Coke Oven Gas**

Effects of Gas Quality on Operations

Tar and Light Oil Recovery

Case Study on By-Product Operations

Optional Lecture

High Level Overview of Cokemaking

Course Information

There is an enrollment limit of 110 registrants. The course fee is **\$1,999.00 up to April 15** or **\$2,250.00 after April 15**. The course fee includes USB with lecture notes, welcome reception, a shirt, lunches and coffee breaks.

You can register online at www.eng.mcmaster.ca/forms/10th-mcmaster-university-cokemaking-course. Receipt of payment is the only guarantee of registration.

On-Site Course Registration

Sunday, May 12 from 4:00 p.m. to 7:00 p.m. at the main lobby of Les Prince Hall (Sterling Street access). Monday, May 13, from 8:00 a.m. to 8:45 a.m. at the registration desk, outside lecture room at the Michael G. DeGroot Centre for Learning & Discovery (MDCL) building.

Accommodation Registration

To promote interaction among registrants and lecturers, we strongly recommend accommodation in residence at the rate of **\$650.00 CDN**. Accommodation fee includes 5 breakfasts and Monday dinner. Extra nights are available at **CDN \$100.00 + 13% taxes/night**.

On site accommodation registration will be Sunday May 12 from 4:00 p.m. to 7 p.m. at the main lobby of Les Prince Hall (Sterling street access), but for early and late arrivals a front desk is open 24/7 in the main lobby of the Commons building. Daily maid service, bed linens, and towels are provided. Please note there is no wake-up service available. Each room has a private bath.

Reception – Sunday, May 12

A Welcome Reception will be held from 7 - 9 p.m. at the University Club of McMaster. Registrants are invited to meet lecturers, members of the Organizing Committee, and fellow participants.

Banquet – Thursday, May 16

Cost: **\$75.00**

Enjoy the food and the spectacular view of the ArcelorMittal and Stelco plants from the other side of Lake Ontario at the **Burlington Golf and Country Club**. (Business casual attire, no jeans allowed)

Coke Oven Computer Game

This is an excellent opportunity to meet and interact with colleagues from all over the world. Delegates have found this to be the highlight of the course. Each group will have a chance to compete to be the lowest coke cost producer in the coal blending competition by using the lecturer information from the course! The game helps the students understand the principles of coal blending and coke quality.

Course Books

Cost: **\$75.00**

Printed version of lecture notes.

Optional Plant Tour – Friday, May 17

Cost: **\$50.00**

Each tour will be limited to 40 registrants on a first come, first served basis. No short sleeves shirts, short pants or open shoes are allowed. Hard hats and safety glasses will be provided.

ArcelorMittal Dofasco Tour

Driving tour of coal handling and cokemaking facilities, followed by a ground level walking tour of No.3 Coke Plant/By-Products Plant.

Stelco – Hamilton Works Tour

A walking tour of the Battery, By-Product Plant and the new Waste Water Treatment Plant.

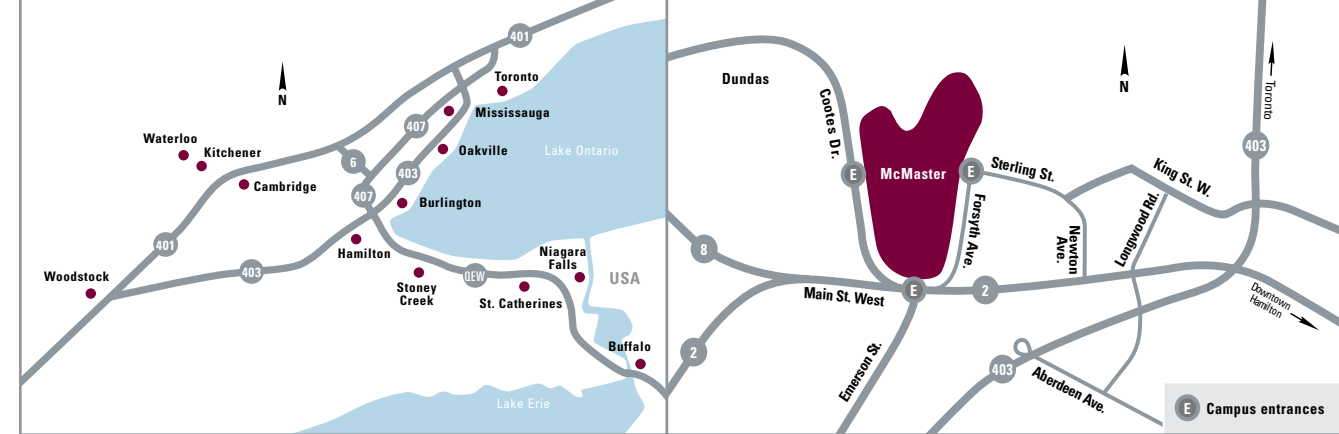
Case Study

Team work activity on a real-world case to analyze operating and process data.

Cancellation Policy

Cancellation after April 15, 2019 Refund 50%; there will be no refunds after May 1, 2019. Substitutions can be made.

The Organizing Committee reserves the right to modify course material or to substitute lecturers without notice.



McMaster Campus

- 1** Les Prince Hall
- 2** Commons building
- 3** TwelvEighty Restaurant, Room B118
McMaster University Student Centre
- 4** Convocation Hall
- 5** **Sterling St.** entrance for course and residence registration on Sunday
- 6** Michael G. DeGroot Centre for Learning and Discovery
- 7** **Main St.** entrance
- P** Parking Zones

Travel Information:

Location: Hamilton is situated midway between Toronto and Niagara Falls. McMaster University is located in the west end of the city.

Getting Here: The nearest large airport is Pearson International in Toronto. Frequent limousine or bus service is available and it takes about one hour. There are also flights from Buffalo NY which is approximately 120 km from Hamilton.

Parking Fees: Residents and non-residents attendees will be charged \$72.00 if purchased at course registration or the course registration desk. McMaster University Parking fee: \$20.00/per day.