12th McMaster University

5:00-6:00 PM REGISTRATION – MDCL outside room 1110

Cokemaking Course

May 11-16, 2025



Lectures take place in the Michael DeGroote Center for Learning and Discovery (MDCL), Room 1110. **Coke oven game, case studies** take place the McMaster University Student Centre (MUSC), CIBC Hall, 3rd floor.

Program

Sunday, May 11

6:00-7:00	Introduction to Cokemaking – Jodi Kesik, ArcelorMittal Dofasco For those who have little or no knowledge of cokemaking
7:00-9:00	REGISTRATION and WELCOME RECEPTION – The University Club
Monday, May	<i>y</i> 12
7:30-8:15 AM	REGISTRATION and BREAKFAST – MDCL outside room 1110
AM SESSION	Chairs: Ted Todoschuk, TwithT Consulting (retired from ArcelorMittal Dofasco) and Chris DiGiovanni, CanmetMATERIALS/McMaster University
8:15-8:30	Opening Remarks and Course Orientation – Jodi Kesik, ArcelorMittal Dofasco and Hatem Zurob, McMaster University
8:30-9:30	The History of Cokemaking – Ted Todoschuk, TwithT Consulting
9:30-9:40	Q&A period
9:40-10:40	Coal from Ground to Coke Plant – Maria Dooley, Elk Valley Resources
10:40-10:50	Q&A period
10:50-11:05	BREAK
11:05-12:05	Fundamentals of Coal and Coke Characterization – Graeme Scott, ArcelorMittal Dofasco
12:05-12:15	Q&A period
12:15-1:30	LUNCH
PM SESSION	Chair: Jason Halko, Elk Valley Resources
1:30-2:30	Design of Coal Blend for Required Coke Properties – Ted Todoschuk, TwithT Consulting
2:30-2:40	Q&A period
2:40-3:00	BREAK
3:00-4:00	Coke Oven Computer Game and Cokemaking Rules of Thumb – Ted Todoschuk, TwithT Consulting
4:00-4:10	Q&A period
7:00-10:00	Coke Oven Computer Game (with bar service and snacks) in MUSC, CIBC Hall – Ted Todoschuk,

TwithT Consulting and Graeme Scott, ArcelorMittal Dofasco

Tuesday, May 13

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7:30-8:30 AM	BREAKFAST – MDCL
AM SESSION	Chair: Jodi Kesik, ArcelorMittal Dofasco
8:30-9:30	Coke in the Blast Furnace – Husain Tapia, ArcelorMittal Dofasco
9:30-9:40	Q&A period
9:40-10:40	Theory of Carbonization – Ted Todoschuk, TwithT Consulting
10:40-10:50	Q&A period
10:50-11:05	BREAK
11:05-12:05	Principles of Coke Oven Design – Mike Boccalon, Stelco Inc.
12:05-12:15	Q&A period
12:15-1:30	LUNCH
PM SESSION	Chair: Ted Todoschuk, TwithT Consulting
1:30-2:30	Recent Trends in Cokemaking Heat Recovery Processes – John Quanci, SunCoke Energy
2:30-2:40	Q&A period
2:40-3:00	BREAK
3:00-4:00	Non-Recovery Cokemaking Case Studies – John Quanci, SunCoke Energy
4:00-4:10	Q&A period
7:00-10:00	Coke Oven Computer Game (with bar service and snacks) in MUSC, CIBC Hall – Ted Todoschuk, TwithT Consulting and Graeme Scott, ArcelorMittal Dofasco (with bar service and snacks)
Wednesday,	May 14
7:30-8:30 AM	BREAKFAST – MUSC, CIBC Hall
AM SESSION	CASE STUDIES - MUSC, CIBC Hall. Chair: Jodi Kesik, ArcelorMittal Dofasco
8:30-9:30	Control of Battery Heating – Michael Boccalon, Stelco Inc.
9:30-9:40	Q&A period
9:40-10:40	Recovery Cokemaking Case Study – Jodi Kesik, ArcelorMittal Dofasco and Lyle Moore, ArcelorMittal Dofasco
10:40-11:00	BREAK
11:00-12:30	Recovery Cokemaking Case Study (continued)
12:30-1:30	LUNCH
PM SESSION	Chair: Carter Dumont, Stelco Inc. – MDCL 1110
1:30-2:30	Introduction to the By-product Plant – Dean Dussault, Stelco Inc.
2:30-2:40	Q&A period
2:40-3:00	BREAK
3:00-4:00	Environmental Issues Facing the Coking Industry into the 21st Century – Julie Wedzinga, Stelco Inc.
4:00-4:10	Q&A period
5:30	BANQUET DINNER Cokemaking Game Awards Presentation – bus departure from MUSC to Burlington Golf & Country Club (No blue jeans or t-shirts. Cash bar available.)
9:00	Bus departure to McMaster

Thursday, May 15

7:30-8:30 AM BREAKFAST - MDCL

AM SESSION Chair: Jason Halko, Elk Valley Resour	son Halko, Elk Valley Resources
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8:30-9:30 Removal of Sulphur and Ammonia from Coke Oven Gas – Matt Cowan, Stelco Inc.

9:30-9:40 Q&A period

9:40-10:40 Effects of Gas Quality on Operations – Greg Elder, Consultant

10:40-10:50 Q&A period

10:50-11:05 BREAK

11:05-12:05 Tar and Light Oil Recovery – Brianna Zekl, Stelco Inc.

12:05-12:15 Q&A period

12:15-1:30 LUNCH – MUSC, CIBC Hall

PM SESSION CASE STUDY - MUSC, CIBC Hall

1:30-3:00 By-product Operation Case Study – Carter Dumont, Stelco Inc. and Greg Elder, Consultant

3:00-3:15 BREAK

3:15-4:45 By-product Operation Case Study (continued)

Friday, May 16

7:30-8:30 AM BREAKFAST - MDCL

AM SESSION Chair: Ted Todoschuk, TwithT Consulting

8:30-9:30 Prolonging Asset Life – Yannick Hergalant, ArcelorMittal Maizières Research | CPM Forbach

9:30-9:40 Q&A period

9:40-10:20 Future Decarbonization Strategy: 2050 – Graeme Scott, ArcelorMittal Dofasco

10:20-10:30 Q&A period

10:30-10:40 BREAK

10:40-11:20 Market Conditions Coal/Coke: Current and Future – Jason Halko, Elk Valley Resources

11:20-12:15 Panel Discussion – Graeme Scott, Jason Halko, Carter Dumont, Yannick Hergalant

12:15-12:30 Coke Oven Game results / Closing Remarks – Ted Todoschuk, Jodi Kesik, Hatem Zurob and

Chris DiGiovanni

12:30 LUNCH

PM SESSION

1:00-4:30 OPTIONAL PLANT TOURS – pre-registration required

Buses depart from McMaster University Student Centre at 1:00 pm

ArcelorMittal Dofasco – Driving tour of coal handling and cokemaking facilities, followed by a ground-level walking tour of No. 3 Coke Plant/By-Products Plant. Long sleeved shirts, long pants and closed-toed shoes are required. PPE will be provided on-site.

Stelco Hamilton Works – A walking tour of the Battery, By-Product Plant and the new Wastewater Treatment Plant. Long sleeved shirts, long pants and closed-toed shoes are required. PPE will be provided on-site.