Lars Skaarup Jensen - DTU Orbit (01/04/2019)

Lars Skaarup Jensen

Organisations

PhD Student, Department of Chemical and Biochemical Engineering
04/07/2003 → 03/09/2013 Former
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VIP

Research outputs:

Decomposition and Oxidation of Pyrite in a Fixed-Bed Reactor

General information
State: Published
Organisations: Department of Chemical and Biochemical Engineering
Pages: 4290-4295
Publication date: 2003
Peer-reviewed: Yes

Publication information
Journal: Industrial & Engineering Chemistry Research
Volume: 42
Issue number: 19
ISSN (Print): 0888-5885
Ratings:
BFI (2019): BFI-level 2
Web of Science (2019): Indexed yes
BFI (2018): BFI-level 2
Web of Science (2018): Indexed yes
BFI (2017): BFI-level 2
Scopus rating (2017): CiteScore 3.4 SJR 0.978 SNIP 1.203
Web of Science (2017): Impact factor 3.141
Web of Science (2017): Indexed yes
BFI (2016): BFI-level 2
Scopus rating (2016): CiteScore 3.1 SJR 0.95 SNIP 1.155
Web of Science (2016): Impact factor 2.843
Web of Science (2016): Indexed yes
BFI (2015): BFI-level 2
Scopus rating (2015): CiteScore 2.87 SJR 0.938 SNIP 1.145
Web of Science (2015): Impact factor 2.567
Web of Science (2015): Indexed yes
BFI (2014): BFI-level 2
Scopus rating (2014): CiteScore 2.85 SJR 1.009 SNIP 1.287
Web of Science (2014): Impact factor 2.587
Web of Science (2014): Indexed yes
BFI (2013): BFI-level 2
Scopus rating (2013): CiteScore 2.6 SJR 0.975 SNIP 1.232
Web of Science (2013): Impact factor 2.235
ISI indexed (2013): ISI indexed yes
Web of Science (2013): Indexed yes
BFI (2012): BFI-level 2
Scopus rating (2012): CiteScore 2.56 SJR 1.054 SNIP 1.32
Web of Science (2012): Impact factor 2.206
ISI indexed (2012): ISI indexed yes
Experimental Investigation of NO from Pulverized Char Combustion

NO formation and reduction during pulverized char combustion in the temperature range 850–1150°C have been investigated in fixed-bed combustion experiments. Chars from a high-volatile bituminous coal and an anthracite have been used. Under single-particle conditions the selectivity for NO formation from combustion of char from both fuel types lies in the range 65–100%. The NO formation selectivity under single-particle conditions was observed to be lowest at 850 °C, to have values close to 100% at 1050 and 1150 °C, and to be independent of O2 concentration. When conditions deviate from single-particle conditions, net NO formation is significantly lower due to NO reduction taking place simultaneously with NO formation. Rate expressions for NO reduction on char both in the presence and in the absence of O2 have been determined. For bituminous coal char, these rates are 10–100 times more rapid than values previously reported in literature, but are consistent with reburn-type experiments employing char as fuel. This discrepancy is mainly attributed to rapid char deactivation prior to measuring of NO reduction rates in previous determinations.

Shortly after pyrolysis, the effective NO-char reaction rate for pulverized bituminous coal char in the temperature range 850–1150 °C has been found to be given by

\[ r_{\text{NO}} = 6 \times 10^6 \text{m}^3 \text{kgC}^{-1} \text{s}^{-1} \times \frac{14800}{T} \times [\text{charC}] \times [\text{NO}] \]
Influence of experimental protocol on activation energy in char gasification: the effect of thermal annealing

**General information**
State: Published
Organisations: CHEC Research Centre, Department of Chemical and Biochemical Engineering
Contributors: Zolin, A., Jensen, A., Dam-Johansen, K., Jensen, L. S.
Pages: 1029-1032
Publication date: 2001
Peer-reviewed: Yes

**Publication information**
Journal: Fuel
Volume: 80
Original language: English
Source: orbit
Source-ID: 51693
Research output: Research - peer-review › Journal article – Annual report year: 2001

NOx from cement production - reduction by primary measures

**General information**
State: Published
Organisations: Department of Chemical and Biochemical Engineering
Contributors: Jensen, L. S.
Publication date: 1999

**Publication information**
Original language: English
Source: orbit
Source-ID: 175249
Research output: Research - peer-review › Book – Annual report year: 1999

FLS-Fuller ILC-low NOx calcerion comissioning and operation at Lone Star St. Cruz in California

**General information**
State: Published
Organisations: Department of Chemical and Biochemical Engineering
Contributors: Thomsen, K., Jensen, L. S., Schomburg, F.
Pages: 542-550
Publication date: 1998
Peer-reviewed: Yes

**Publication information**
Journal: Zement-Kalk-Gips International
Projects:

**Optimization of geo-polymer cement production technology**
Segura, I. P., PhD Student, Department of Chemical and Biochemical Engineering
Jensen, P. A., Main Supervisor
Dame, A. J., Supervisor
Canut, M. M. C., Supervisor
Jensen, L. S., Supervisor
01/04/2019 → 31/03/2022
Project: PhD

**Oxy-fuel forbrænding af kul og biomasse**
Toftegaard, M. B., PhD Student, Department of Chemical and Biochemical Engineering
Jensen, A. D., Main Supervisor
Glarborg, P., Supervisor
Jensen, P. A., Supervisor
Sander, B., Supervisor
Jappe Frandsen, F., Examiner
Hupa, M. M., Examiner
Jensen, L. S., Examiner
ErhvervsPhD-ordningen VTU
01/04/2007 → 24/08/2011
Award relations: Oxy-fuel forbrænding af kul og biomasse
Project: PhD

**Forbrændingsmekanismer ved udnyttelse af affald som brændsel i cementproduktion**
Larsen, M. B., PhD Student, Department of Chemical and Biochemical Engineering
Dam-Johansen, K., Main Supervisor
Jappe Frandsen, F., Supervisor
Glarborg, P., Supervisor
Jensen, L. S., Supervisor
Livbjerg, H., Examiner
Høstgaard-Jensen, J., Examiner
Leckner, B., Examiner
ErhvervsPhD-ordningen VTU
01/10/2003 → 30/04/2007
Award relations: Forbrændingsmekanismer ved udnyttelse af affald som brændsel i cementproduktion
Project: PhD

**Cyklon forvarmerdesign med henblik på emissionsbegrensning i cementindustrien**
Hansen, J. P., PhD Student, Department of Chemical and Biochemical Engineering
Dam-Johansen, K., Main Supervisor
Jensen, L. S., Supervisor
Wedel, S., Supervisor
Johnsson, J. E., Examiner
Hansen, P. F. B., Examiner
Hupa, M. M., Examiner
Erhvervsforskerordningen
01/09/2000 → 18/01/2004
Award relations: Cyklon forvarmerdesign med henblik på emissionsbegrensning i cementindustrien
Project: PhD

**HCI emission from cement plants**
Pachitsas, S., PhD Student, Department of Chemical and Biochemical Engineering
Wedel, S., Main Supervisor
Burners for Cement Kilns
Pedersen, M. N., PhD Student, Department of Chemical and Biochemical Engineering
Dam-Johansen, K., Main Supervisor
Clausen, S., Supervisor
Jensen, P. A., Supervisor
Jensen, L. S., Supervisor
Christensen, J. M., Examiner
Hansen, L. E., Examiner
Tokheim, L., Examiner
Samfinansierede - Virksomhed
01/03/2015 → 17/09/2018
Award relations: Burners for Cement Kilns
Project: PhD

Multiphase flow and fuel conversion in cement calciner
Nakhaei, M., PhD Student, Department of Chemical and Biochemical Engineering
Dam-Johansen, K., Main Supervisor
Glarborg, P., Supervisor
Grévain, D., Supervisor
Jensen, L. S., Supervisor
Krühne, U., Examiner
Larsen, M. B., Examiner
Leckner, B., Examiner
Wu, H., Supervisor
Samfinansierede - Virksomhed
15/05/2015 → 12/11/2018
Award relations: Multiphase flow and fuel conversion in cement calciner
Project: PhD

Reduktion af Nox fra kalcinitorsystemer
Jensen, L. S., PhD Student, Department of Chemical and Biochemical Engineering
Dam-Johansen, K., Main Supervisor
Glarborg, P., Supervisor
Hansen, P. F. B., Examiner
Livbjerg, H., Examiner
Erhvervsforskerordningen
01/03/1996 → 22/12/1999
Award relations: Reduktion af Nox fra kalcinitorsystemer
Project: PhD

Emission fra cement produktion
Hu, G., PhD Student, Department of Chemical and Biochemical Engineering
Dam-Johansen, K., Main Supervisor
Hansen, J. P., Supervisor
Wedel, S., Supervisor
Kiil, S., Examiner
Hupa, M. M., Examiner
Jensen, L. S., Examiner
DTU-lønnet stipendie
01/02/2004 → 30/04/2007
Award relations: Emission fra cement produktion
Project: PhD
Clinker Burning Kinetics and Mechanisms
Telschow, S., PhD Student, Department of Chemical and Biochemical Engineering
Dam-Johansen, K., Main Supervisor
Jappe Frandsen, F., Supervisor
Wedel, S., Supervisor
Jensen, P. A., Examiner
Hupa, M. M., Examiner
Jensen, L. S., Examiner
DTU-lønnet stipendie
01/03/2008 → 24/05/2012
Award relations: Clinker Burning Kinetics and Mechanisms
Project: PhD

Processes for Low CO2 Emissions
Pathi, S. K., PhD Student, Department of Chemical and Biochemical Engineering
Dam-Johansen, K., Main Supervisor
Hjuler, K., Supervisor
Illerup, J. B., Supervisor
Lin, W., Supervisor
Kill, S., Examiner
Jensen, L. S., Examiner
Murillo, R., Examiner
Technical University of Denmark
01/01/2010 → 18/12/2013
Award relations: Processes for Low CO2 Emissions
Project: PhD

Optimized Production of cement
Rasmussen, M. H., PhD Student, Department of Chemical and Biochemical Engineering
Dam-Johansen, K., Main Supervisor
Illerup, J. B., Supervisor
Pedersen, K. H., Supervisor
Wedel, S., Supervisor
Jappe Frandsen, F., Examiner
Jensen, L. S., Examiner
Yrjas, P. K., Examiner
1/3 DTU-stip, 2/3 FUR/andet
01/09/2007 → 29/11/2011
Award relations: Optimized Production of cement
Project: PhD

Treatment of Lignin and Waste Residues by Flash Pyrolysis
Trinh, N. T., PhD Student, Department of Chemical and Biochemical Engineering
Dam-Johansen, K., Main Supervisor
Jensen, P. A., Supervisor
Jappe Frandsen, F., Examiner
Jensen, L. S., Examiner
Spliethoff, H., Examiner
1/3 DTU-stip, 2/3 FUR/andet
01/01/2010 → 30/09/2013
Award relations: Treatment of Lignin and Waste Residues by Flash Pyrolysis
Project: PhD

CHEC
CHEC is an acronym for the fundamental and applied research programme on Combustion and Harmful Emission Control. CHEC's main areas of expertise are industrial high-temperature processes, formation and removal of pollutants, particulate solids (characterisation, reactivity and dynamics). Within these areas the objectives are to educate scientists and engineers, to gain new fundamental information on the subjects, to assist industry and public authorities in the selection, development, design and operation of processes in order to improve efficiencies and in order to avoid or minimise harmful emissions, to catalyse international cooperation between Danish companies and Danish and foreign research organisations.
Dam-Johansen, K., Project Manager, Department of Chemical and Biochemical Engineering
Ambrosius, M., Project Participant, Department of Chemical and Biochemical Engineering
Becerra, S. V., Project Participant, Department of Chemical and Biochemical Engineering
Cenni, R., Project Participant, Department of Chemical and Biochemical Engineering
Jappe Frandsen, F., Project Participant, Department of Chemical and Biochemical Engineering
Frandsen, J., Project Participant, Department of Chemical and Biochemical Engineering
Glarborg, P., Project Participant, Department of Chemical and Biochemical Engineering
Hansen, E. M. T. H., Project Participant, Department of Chemical and Biochemical Engineering
Hansen, J., Project Participant, Department of Chemical and Biochemical Engineering
Henriksen, A., Project Participant, Department of Chemical and Biochemical Engineering
Jensen, A. D., Project Participant, Department of Chemical and Biochemical Engineering
Jensen, L. S., Project Participant, Department of Chemical and Biochemical Engineering
Jensen, P. A., Project Participant, Department of Chemical and Biochemical Engineering
Jørgensen, T. L., Project Participant, Department of Chemical and Biochemical Engineering
Lans, R. P. V. D., Project Participant, Department of Chemical and Biochemical Engineering
Lin, W., Project Participant, Department of Chemical and Biochemical Engineering
Stenseng, M., Project Participant, Department of Chemical and Biochemical Engineering
Wolfe, T., Project Participant, Department of Chemical and Biochemical Engineering
Zolin, A., Project Participant, Department of Chemical and Biochemical Engineering
Degn, L., Project Participant, Department of Chemical and Biochemical Engineering
Kiil, S., Project Participant, Department of Chemical and Biochemical Engineering
Kristensen, K. A., Project Participant, Department of Chemical and Biochemical Engineering
Michelsen, H. P., Project Participant, Department of Chemical and Biochemical Engineering
Olsen, S. M., Project Participant, Department of Chemical and Biochemical Engineering
Skjøth-Rasmussen, M. S., Project Participant, Department of Chemical and Biochemical Engineering
Rejel, H., Project Participant, Department of Chemical and Biochemical Engineering
Schmidt, L. M., Project Participant, Department of Chemical and Biochemical Engineering
Frey, M., Project Participant, Department of Chemical and Biochemical Engineering
Kristensen, L., Project Participant, Department of Chemical and Biochemical Engineering
Nygaaard, H. G., Project Participant, Department of Chemical and Biochemical Engineering
Leth-Miller, R., Project Participant, Department of Chemical and Biochemical Engineering
Sullivan, N. P., Project Participant, Department of Chemical and Biochemical Engineering
Johnsson, J. E., Project Participant, Department of Applied Chemistry

Ukendt: DKK 12,000,000.00
10/01/1986 → …


Award relations: CHEC

Project: Research