



# Radiative Heat Transfer in Coal-Fired Furnaces and Oxycoal Retrofit Considerations

By Jens Erfurth

Shaker Verlag Feb 2012, 2012. Buch. Book Condition: Neu. 211x147x22 mm. Neuware - Oxycoal combustion is the combustion of coal using a mixture of oxygen and cooled recycled flue gas in place of air. In the last years it has gained interest as a means of CO<sub>2</sub> capture from stationary point sources. In particular, under emission mitigation regimes the retrofit of existing coal-fired power plants may help avoid 'stranded assets' through lower emissions and thus costs if certain technical criteria can be met. Among these is the need to keep total heat transfer in the boiler constant while not raising the furnace exit temperature. The altered gas composition in oxycoal combustion leads to changes in both convective and radiative heat transfer, of which the latter, while of overwhelming importance in the furnace, poses a particular challenge to modellers. This work is thus primarily concerned with the simulation of radiative heat transfer. After a short introduction to oxycoal combustion, a general discussion of Computational Fluid Dynamics (CFD) models for coal combustion is given. Emphasis is placed on the physics of molecular gas band radiation, respective modelling approaches and their application within a CFD context. Based on this analysis, it is concluded...



**READ ONLINE**  
[ 7.72 MB ]

## Reviews

*These kinds of publication is the greatest pdf available. Better then never, though i am quite late in start reading this one. Once you begin to read the book, it is extremely difficult to leave it before concluding.*

-- **Lorena Streich**

*It becomes an awesome pdf that I have actually read through. It really is full of knowledge and wisdom You may like how the writer compose this book.*

-- **Amanda Gleichner**

## See Also



### [Programming in D](#)

Ali Cehreli Dez 2015, 2015. Buch. Book Condition: Neu. 264x182x53 mm. This item is printed on demand - Print on Demand Neuware - The main aim of this book is to teach D to readers who are new to computer programming. Although...



### [JA\] early childhood parenting :1-4 Genuine Special\(Chinese Edition\)](#)

paperback. Book Condition: New. Ship out in 2 business day, And Fast shipping, Free Tracking number will be provided after the shipment. Paperback. Pub Date :2006-01-01 Pages: 179 Publisher: the China Pictorial Our book is all new book of genuine special spot any...



### [Programming in D: Tutorial and Reference](#)

Ali Cehreli, 2015. Paperback. Book Condition: New. 254 x 178 mm. Language: English . Brand New Book \*\*\*\*\* Print on Demand \*\*\*\*\*.The main aim of this book is to teach D to readers who are new to computer programming. Although having experience...



### [Psychologisches Testverfahren](#)

Reference Series Books LLC Nov 2011, 2011. Taschenbuch. Book Condition: Neu. 249x191x7 mm. This item is printed on demand - Print on Demand Neuware - Quelle: Wikipedia. Seiten: 100. Kapitel: Myers-Briggs-Typindikator, Keirsey Temperament Sorter, DISG, Eignungstest für das Medizinstudium, Adult Attachment Interview,...



### [Index to the Classified Subject Catalogue of the Buffalo Library; The Whole System Being Adopted from the Classification and Subject Index of Mr. Melvil Dewey, with Some Modifications .](#)

Rarebooksclub.com, United States, 2013. Paperback. Book Condition: New. 246 x 189 mm. Language: English . Brand New Book \*\*\*\*\* Print on Demand \*\*\*\*\*.This historic book may have numerous typos and missing text. Purchasers can usually download a free scanned copy of the...



### [Two Treatises: The Pearle of the Gospell, and the Pilgrims Profession to Which Is Added a Glasse for Gentlewomen to Dresse Themselves By. by Thomas Taylor Preacher of Gods Word to the Towne of Reding. \(1624-1625\)](#)

Proquest, Eebo Editions, United States, 2010. Paperback. Book Condition: New. 246 x 189 mm. Language: English . Brand New Book \*\*\*\*\* Print on Demand \*\*\*\*\*.EARLY HISTORY OF RELIGION. Imagine holding history in your hands. Now you can. Digitally preserved and previously accessible...