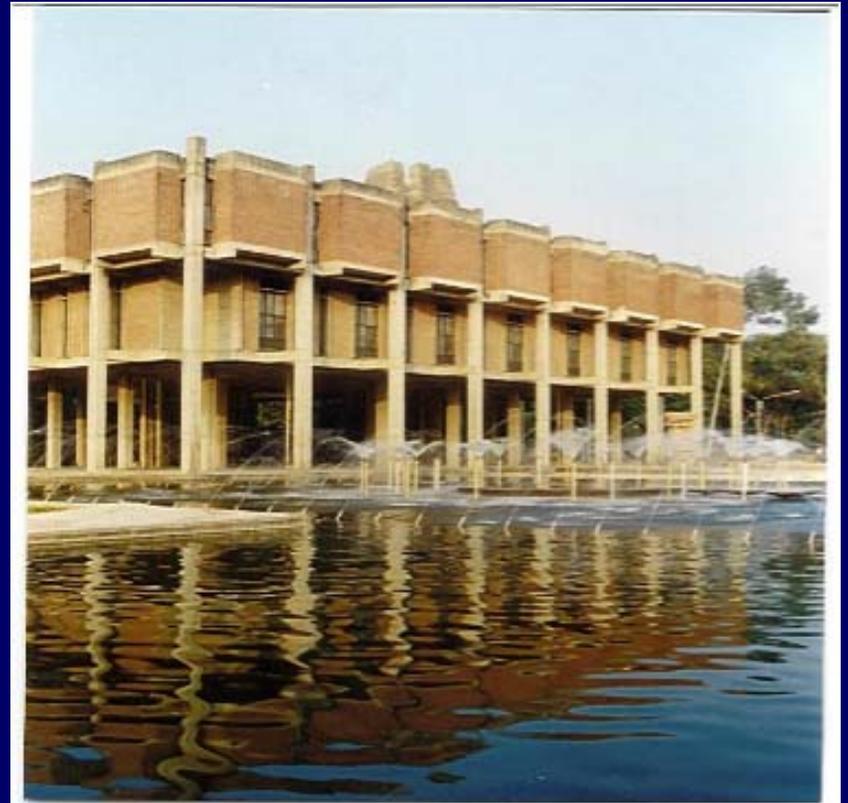


Depth customization of DSpace: Best practices and techniques of institutional repository at IIT Kanpur, India

By

**S. K. Vijaianand
V. D. Shrivastava
Gaurav Shukla**





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14-Sep-1971	A 13 MHz SPIN ECHO NUCLEAR MAGNETIC RESONANCE SPECTROMETER	Singh, Ranjit	Sharan, R	M.TECH.	EE
12-Jul-2004	A 1- VOLT CLASS AB CMOS BUFFER AMPLIFIER	Rathi, Amit Kumar	Mazhari, Baquer	M.TECH.	EE
10-Jan-2007	2-D Continuous Wavelet Transform and its applications in Image Analysis	Kumar, S Kiran	Sircar, Pradip	M.TECH.	EE
24-Jan-1996	2-DIMENSIONAL MODEL OF FLUORESCENCE IN HUMAN TISSUE AND SPECTRAL STUDIES OF GALLSTONE	Das, Niratan	Pradhan, Asima	M.TECH.	LTP
5-Apr-1999	2-D PHASE RETRIEVAL : A WAVELET APPROACH	Ganguly, Subroto	Gupta, Sumana	M.TECH.	EE
23-Jul-1983	A 2-D THERMO-MECHANICAL FINITE ELEMENT MODEL FOR RESIDUAL STRESS DETERMINATION DURING WELDING AND ANNEALING	Dutta, B K	Singh, Bhupinder Pal; Sundararajan, V	M.TECH.	ME
2-Jun-2008	2-Silylmethylcyclopropyl carbinols as precursors to tetrahydropyrans and indenenes, and homo-Nazarov cyclization of 2-silylmethylcyclopropyl heteroaryl ketones	Naganaboina, Vijaya Kumar	Yadav, Veejendra K	PH.D.	CHM
7-Aug-2008	3D CHILD Virtual Platform for Evaluation of Products for Children	Pillai, S Jayesh	Roy, Satyaki	M.DES.	DP
1-Apr-1997	3-D MODEL BASED APPROACH TO VIDEO COMPRESSION	Anandh, P	Sharma, Govind; Gupta, Sumana	M.TECH.	EE
28-Feb-2001	3D OBJECT REALIZATION FROM ORTHOGRAPHIC PROJECTIONS	Jain, Anurag Kumar	Sahay, B	M.TECH.	ME
2-Aug-2003	3D VIDEOCODING: A NOVEL APPROACH	Maiti, Kausik	Gupta, Sumana	M.TECH.	EE
7-Jun-2004	3D VIDEO CODING BASED ON MIXED TRANSFORM TECHNIQUES	Ravi, Kishore Paruchuru	Gupta, Sumana	M.TECH.	EE
12-Jan-1987	4-tBUTYL LODOXYBENZENE: AN EFFECTIVE OZONE EQUIVALENT	Singh, Shio Kumar	Ranganathan, S	PH.D.	CHM
24-Jul-1989	57FE MOSSBAUER SPECTROSCOPIC STUDIES OF TI- AND SN-SUBSTITUTED NI-ZN FERRITES	Srivastava, Ramach Chandra	Srinivasan, T M; Khan, D C	PH.D.	PHY

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Title: Implementation of Eddy Viscosity Turbulence Models in a General Purpose CFD Solver
Author(s): [Rapaka, Narsimha Reddy](#)
Supervisor(s): [Eswaran, Vinayak](#)
Keyword(s): [Eddy viscosity turbulence models](#), [K-epsilon model](#), [K-omega model](#), [Finite volume method](#)
Subject(s): [Turbulence](#)

Abstract: Three eddy viscosity turbulence models: standard $k - \epsilon$ model with wall treatment, standard $k - u$ model and SST model are implemented in a general purpose CFD solver, IITK-DAE ANUPRAVAHA SOLVER. Incompressible finite volume solver with non-staggered grid arrangement has been used along with a fully implicit (SIMPLE like) and semi-coupled algorithm to numerically solve the set of governing equations. These three models are successfully verified against four standard test cases: zero pressure gradient boundary layer, two dimensional plane channel flow, two dimensional backward facing step and axisymmetric round jet. The $k - \epsilon - v_2 - f$ model is also implemented with the modifications proposed by Lien and Kalitzin [27], but could not be validated successfully.

Referred IITK Theses:

- 1). [IMPLEMENTATION OF SOME HIGH AND LOW REYNOLDS NUMBER TURBULENCE MODELS](#)
- 2). [COMPUTATION OF VARIABLE DENSITY FLOWS](#)
- 3). [A comparison of several turbulence models on benchmark problems](#)
- 4). [SIMULATION OF TURBULENT COMBUSTION BY THE EDDY DISSIPATION MODEL](#)

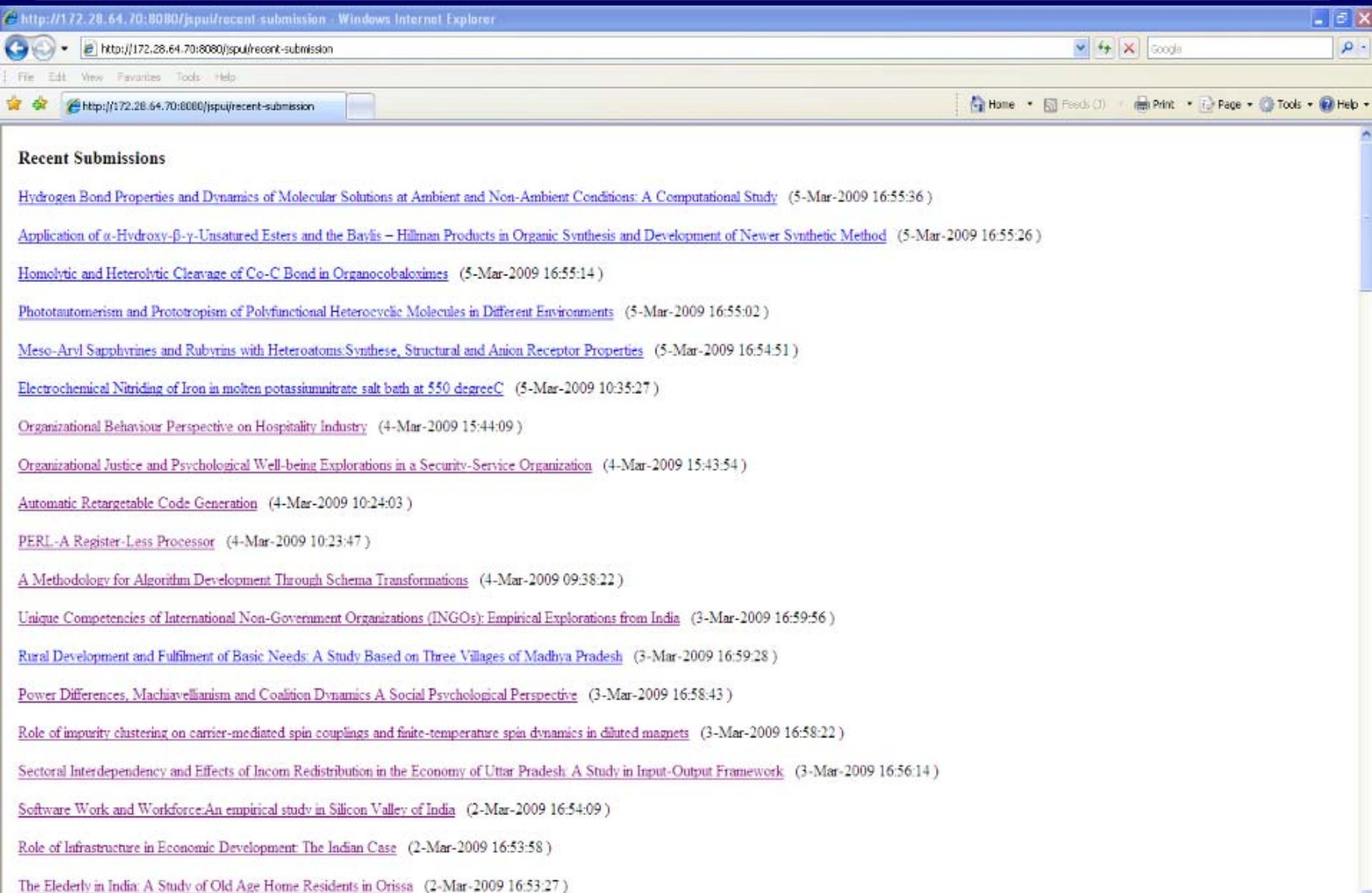
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2004-07-29	CFD ANALYSIS OF A LOW PRESSURE CHEMICAL VAPOR DEPOSITION REACTOR [9]	Eswaran, Vinayak	Bokade, Vilas K
2006-06-02	Implementation of Eddy Viscosity Turbulence Models in a General Purpose CFD Solver [8]	Eswaran, Vinayak	Rapaka, Narsimha Reddy
2006-06-19	IMPLEMENTATION OF SOME HIGH AND LOW REYNOLDS NUMBER TURBULENCE MODELS [5]	Eswaran, Vinayak	Verma, Dhamendra Kumar
2005-04-26	AN ALGORITHM TO SOLVE CONJUGATE HEAT TRANSFER PROBLEMS [5]	Eswaran, Vinayak	Sharma, Ashish
2006-08-01	Improvement of Current Dynamics During Controller Saturation in a D-STATCOM [4]	Sensarma, Partha Sarathi	Bachana, Ravikanth
1997-03-13	BEHAVIOUR OF STEEL EMBEDDED PLATES IN R.C.C. STRUCTURES : A PARAMETRIC STUDY [4]	Chakrabarti, Sekhar K	Panisetty, Rajashekher
2004-08-31	EXPERIMENTAL STUDY ON THE BEHAVIOUR OF PLATE-ANCHOR ASSEMBLY EMBEDDED IN CONCRETE UNDER CYCLIC LOADING [4]	Chakrabarti, Sekhar K	Sahu, Deepak Kumar
1995-09-25	NON LINEAR MODELLING OF EMBEDDED PLATE: PREDICTION OF CAPACITY AND BEHAVIOR [4]	Chakrabarti, Sekhar K	Mishra, Ramesh C
2006-02-02	TABS FOR CONTROLLING SONIC AND SUPERSONIC JETS [4]	Rathakrishnan, E	Clement, Shibu
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1999-01-01	DISASSEMBLER USING HIGH LEVEL PROCESSOR MODELS [3]	Moona, Rajat	Jain, Nihal Chand
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2004-07-12	COMPUTATION OF FLOWS PAST MULTI-ELEMENT AIRFOIL USING SPALART-ALLMARAS TURBULENCE MODEL [3]	Mittal, Sanjay	De, Ashok
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2004-07-26	ANALYTICAL STUDY OF DYNAMIC BEHAVIOR OF STEEL PLATE-ANCHOR ASSEMBLY EMBEDDED IN CONCRETE [3]	Chakrabarti, Sekhar K	Arghadeep, Laskar
1990-03-13	STEEL EMBEDDED PLATES IN R.C.C. STRUCTURES : A PARAMETRIC STUDY [3]	Chakrabarti, Sekhar K	Tripathi, Raghunath P
2004-10-26	AVAILABLE TRANSFER CAPABILITY DETERMINATION AND CONGESTION MANAGEMENT IN COMPETITIVE ELECTRICITY MARKETS [3]	Srivastava, S C	Kumar, Ashwani

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Title: Electro Discharge Machining Tool Design and Development of Electroconductive Ceramic Tool Materials
Author(s): [Dharmendra, B V](#)
Supervisor(s): [Dhanda, Sanjay Govind](#)
[Reddy, N Venkata Basu, Bikramjit](#)
Keyword(s): EDM, Tool Design, Electro Discharge Machining, Ceramic Tool Materials
Subject(s): EDM Tool Design

Abstract: The last few decades have witnessed a gradual technological transformation from the conventional to non-conventional machining technology, primarily to meet increasing demands in many technology sectors, like space technology, biomedical technology etc. Such demand has also necessitated the development of advanced materials, in particular tough and hard materials such as die steels, super alloys, high strength temperature resistant (HSTR) alloys, ceramics and cermet materials. It has been widely recognized that advanced machining processes (AMPs) are the preferred techniques for the fabrication and machining of such advanced materials. Various AMPs are currently available for machining cavities, such as ultrasonic machining (USM), plasma arc machining (PAM), photochemical machining (PCM), Electro discharge machining (EDM), Electron beam machining (EBM) and electrochemical arc machining (ECAM). The performance of these AMPs can be evaluated with respect to material, characterization of cavities and ...

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Title: Experimental Investigations of breakdown voltage of atmospheric air for different electrode configurations under weakly and extremely nonuniform electric field conditions with high voltage dc

Author(s): Mehndiratta, Vikram

Supervisor(s): Arora, Ravindra

Keyword(s): Atmospheric Air, Breakdown Voltage, High Voltage DC, Weakly and Extremely Nonuniform Fields

Subject(s): High Voltage Engineering

Abstract: Atmospheric air is the most important, freely available, cheapest and most widely used gaseous dielectric. The behaviour of air, when subjected to electric stress, is an important aspect for insulation system design in High Voltage Engineering. The knowledge of maximum field intensity in the electrode system of an equipment and maximum permissible electric stress which air as a dielectric can withstand provides a reliable and durable insulation system. Therefore, it is desirable to investigate the breakdown strength of atmospheric air as a dielectric when subjected to electric stress under different conditions. In this work, the variation of breakdown strength of air is investigated in weakly nonuniform and extremely nonuniform field conditions, when subjected to positive and negative polarity dc voltages. With this objective, various electrode configurations of different dimensions have been examined with either polarity dc voltages, changing gap distances between the electrodes. The electric field...

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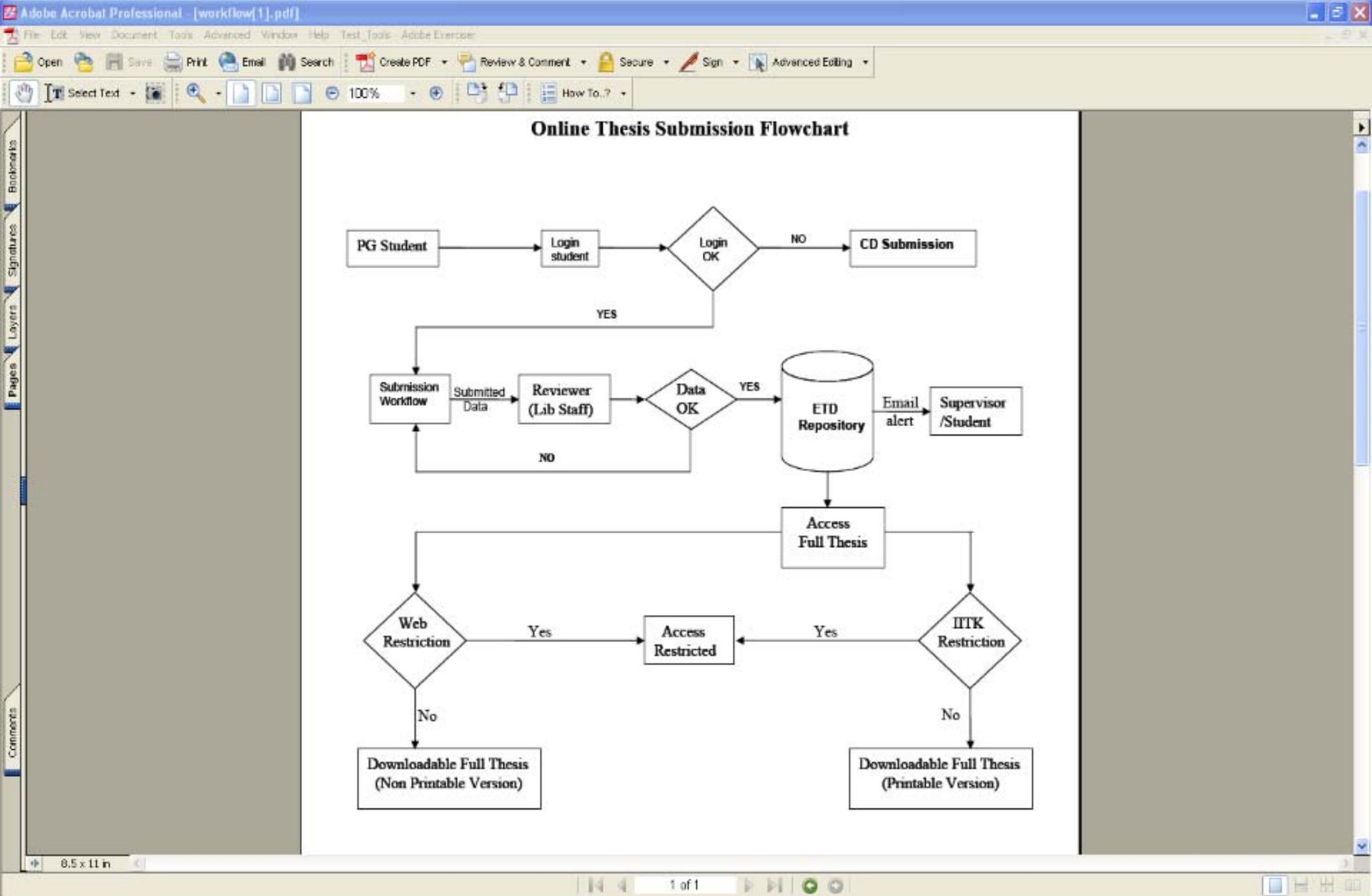
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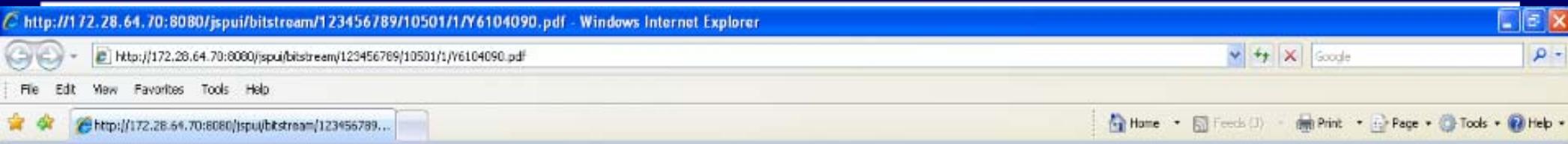
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Title: Decentralized control of a kinetically controlled ideal reactive distillation column

Author(s): [Kaistha, N](#)

Co-author(s) : Kumar, M V P

Source: [CHEMICAL ENGINEERING SCIENCE](#), 63 (1): 228-243, 2008

Keyword(s) : [Reactive distillation control](#), [Inferential control](#), [Control structure](#), [Decentralized control](#)

Subject Area: [Chemical Engineering](#)

Abstract: Two-point and three-point temperature control structures are proposed for a kinetically controlled ideal reactive distillation (RD) column. The control structures maintain stable column operation for large throughput changes. However, large deviations in the final product purities are seen with three-point control giving comparatively lower deviations. The large product purity deviations are due to the kinetic regime so that two temperature set-points are adjusted in a cascade arrangement to maintain the distillate and bottoms purity. The proposed two-point and three-point structures with cascade compensation of the temperature set-points effectively maintain the distillate and bottoms purity for a large throughput decrease. However, the two-point structures fail for a large throughput increase. This is because in the kinetically controlled regime, maintaining the distillate purity requires an increase in the effective reflux ratio to internally recycle the escaping reactants back into the reactive zone. The two-point structures that use the fixed reflux ratio policy thus fail as an infeasible steady state is sought. The three-point structures effectively maintain the product purities as the reflux ratio is indirectly adjusted through the manipulation of the reflux rate. The work highlights the need for understanding the interaction between the reaction and separation sections for effective RD control system design.

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Document ID: IITK08064

DOI: <http://dx.doi.org/10.1016/j.ces.2007.09.029>

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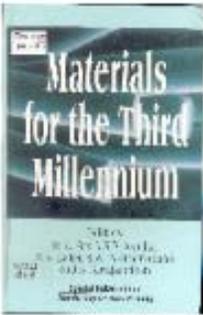
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Publisher: OXFORD & IBH PUBLISHING

Publication Year: 2001

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- Work flow should be more robust
- Statistics for monthly
- As new version is more generalized, the problem comes in making specific changes as it reflects to all of the features associated with it
- New version doesn't have the features in the old version



Acknowledgement



नमस्ते

Namaste

