

**EIGHTEENTH AMENDMENT TO
ELSEVIER SUBSCRIPTION AGREEMENT**

WHEREAS, the parties hereto have previously entered into an agreement dated 5 February 2009 (the "Agreement") as last amended on 9 November 2010 and wish to amend the Agreement as set forth in this amendment ("Amendment").

NOW, THEREFORE, in consideration of the mutual promises and covenants set forth below, and for such other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereto agree to amend the Agreement as of the execution date below as set forth below and on Schedule 1.

Except as specifically amended hereby, all of the existing terms and conditions of the Agreement are hereby ratified. Capitalized terms used herein that are not otherwise defined shall have the meanings ascribed to them in the Agreement. To the extent any terms or conditions of the Agreement conflict with or are inconsistent with this Amendment, the terms of this Amendment shall prevail.

IN WITNESS WHEREOF, the parties have executed this Amendment by their respective, duly authorized representatives as of 15 December 2010.

**THE REGENTS OF THE UNIVERSITY OF CALIFORNIA o/b/o
THE CALIFORNIA DIGITAL LIBRARY
(Subscriber)**

[Text deleted]

AS
JAN 07 2011

Name:

Title:

Executive Director, 1/2010

ELSEVIER B.V.

[Text deleted]

Title: Managing Director, Global Sales & Customer Marketing, Science & Technology

Amendment No.: 1-2010337263; 1-2025668679

SW

**EIGHTEENTH AMENDMENT TO
ELSEVIER SUBSCRIPTION AGREEMENT
Schedule 1
Subscribed Products/Access/Fees**

UNIVERSITY OF CALIFORNIA, BERKELEY

Amendment No.: 1-2010337263; 1-2025668679

Subscribed Products – publisher	Access	2010	2011	2012
SciVerse® ScienceDirect® online – Elsevier B.V	sciencedirect. sciverse.com		[Text deleted]	
eBook Titles		[Text deleted]		
Elsevier eBooks Collections - Agricultural and Biological Sciences 2007 - Agricultural and Biological Sciences 2008 - Agricultural and Biological Sciences 2009 - Agricultural and Biological Sciences 2010 - Agricultural and Biological Sciences 2011 - Agricultural and Biological Sciences pre-2007 - Biochemistry, Genetics and Molecular Biology 1995 - 2006 - Biochemistry, Genetics and Molecular Biology 2007 - Biochemistry, Genetics and Molecular Biology 2008 - Biochemistry, Genetics and Molecular Biology 2009 - Biochemistry, Genetics and Molecular Biology 2010 - Biochemistry, Genetics and Molecular Biology 2011 - Business, Management, Hospitality and Tourism 2007 - Business, Management, Hospitality and Tourism 2008 - Business, Management, Hospitality and Tourism 2009 - Business, Management, Hospitality and Tourism 2010 - Business, Management, Hospitality and Tourism 2011 - Earth and Planetary Sciences 2007 - Earth and Planetary Sciences 2008 - Earth and Planetary Sciences 2009 - Earth and Planetary Sciences 2010 - Earth and Planetary Sciences 2011 - Environmental Science 2007 - Environmental Science 2008 - Environmental Science 2009 - Environmental Science 2010 - Environmental Science 2011 - Environmental Science pre-2007 - Finance 2007 - Finance 2008 - Finance 2009 - Finance 2010 - Finance 2011 - Immunology and Microbiology 1995 - 2006				

aw

- Immunology and Microbiology 2007
- Immunology and Microbiology 2008
- Immunology and Microbiology 2009
- Immunology and Microbiology 2010
- Immunology and Microbiology 2011
- Mathematics 2010
- Mathematics 2011
- Neuroscience 1995 - 2006
- Neuroscience 2007
- Neuroscience 2008
- Neuroscience 2009
- Neuroscience 2010
- Neuroscience 2011
- Physics and Astronomy 2009
- Physics and Astronomy 2010
- Physics and Astronomy 2011

[Text deleted]

- Elsevier Reference Works (perpetual access)
- Comprehensive Natural Products II: Chemistry and Biology
 - Comprehensive Membrane Science and Engineering
 - Comprehensive Nano Science and Technology
 - Encyclopedia of Ocean Sciences (Second Edition)

- Elsevier Book Series Backfiles (pre-2000)
- Comprehensive Analytical Chemistry
 - Engineering
 - Handbook of Statistics
 - Handbook of Numerical Analysis
 - Physics and Astronomy

- Elsevier Book Series / Handbook Series (2006-)
- Comprehensive Analytical Chemistry
 - Engineering (2006-)
 - Handbook of Statistics
 - Handbook of Numerical Analysis
 - Physics & Astronomy (2006-)

TOTAL FEES

Elsevier Book Series/Handbook Series Additional Terms and Conditions

Upon termination of all of the Subscriber's annual subscriptions on SciVerse ScienceDirect online, the Subscriber may, at its option, (1) acquire, load and technically format on a server that enables access and use by Authorized Users an electronic copy of the above book series/handbook series for cost and/or (2) continue to access such books online for an annual access fee based on the number of chapters downloaded from such books during the prior twelve (12) months at a rate of \$0.081 per download (adjusted annually for inflation and cost increases), in accordance with the usage provisions of the Agreement, which provisions shall survive the termination of the Agreement. Elsevier shall make available for inspection by a duly authorized auditor of the Subscriber, at the Subscriber's sole expense, the records concerning the calculation of the annual access fee one time per year during regular business hours upon thirty (30) days written notice to Elsevier. The electronic copy may not contain links and other features and functionality associated with the online version. If a particular book is withdrawn by Elsevier or not renewed by the Subscriber, but the Subscriber remains a SciVerse ScienceDirect online subscriber, the Subscriber may continue to access online, at no

additional charge, such formerly subscribed book for the publication years paid, provided that Elsevier continues to hold the electronic rights thereto.

Elsevier Reference Works Additional Terms and Conditions

The perpetual access granted hereunder for the above reference work(s) is subject to payment of a one-time fee set forth in the fee table above and, after the initial year of the term of this Agreement, an annual access fee in an amount not to exceed [Text deleted] percent of such one-time fee. The annual access fee will not be charged if the Subscriber maintains an annual subscription on SciVerse ScienceDirect online, and in the event that all such annual subscriptions are terminated, the Subscriber may, at its option, continue to access such reference work(s) online for an annual access fee based on the number of chapters downloaded from such reference work(s) during the prior twelve (12) months at a rate of \$0.081 per download (adjusted annually for inflation and cost increases), in accordance with the usage provisions of the Agreement. Elsevier shall make available for inspection by a duly authorized auditor of the Subscriber, at the Subscriber's sole expense, the records concerning the calculation of such annual access fee one time per year during regular business hours upon thirty (30) days written notice to Elsevier. In the event that the Subscriber does not pay any reference work(s) annual access fee or maintain any annual subscription on ScienceDirect online, the Subscriber may, at its option, (1) acquire a copy of such reference work(s) in print, if available, at a [Text deleted] percent discount off the then current list price and/or (2) acquire, load and technically format on a server that enables access and use by Authorized Users an electronic copy of such reference work(s) for cost in accordance with the usage provisions of the Agreement. The copy may not contain links and other features and functionality associated with the online version.

Elsevier eBooks Additional Terms and Conditions

The perpetual access granted hereunder for the above eBooks is subject to payment of a one-time fee set forth in the fee table above and, after the initial year of the term of this Agreement, an annual access fee in an amount not to exceed [Text deleted] percent of such one-time fee. The annual access fee will not be charged if the Subscriber maintains an annual subscription on SciVerse ScienceDirect online, and in the event that all such annual subscriptions are terminated, the Subscriber may, at its option, continue to access the eBooks online for an annual access fee based on the number of chapters downloaded from such eBooks during the prior twelve (12) months at a rate of \$0.081 per download (adjusted annually for inflation and cost increases), in accordance with the usage provisions of the Agreement. Elsevier shall make available for inspection by a duly authorized auditor of the Subscriber, at the Subscriber's sole expense, the records concerning the calculation of such annual access fee one time per year during regular business hours upon thirty (30) days written notice to Elsevier. In the event that the Subscriber does not pay any eBooks annual access fee or maintain any annual subscription on SciVerse ScienceDirect online, the Subscriber may, at its option, acquire, load and technically format on a server that enables access and use by Authorized Users an electronic copy of such eBooks for cost in accordance with the usage provisions of the Agreement. The copy may not contain links and other features and functionality associated with the online version. A collection discount and a "slippage" discount of [Text deleted] percent, to account for titles that were expected to appear in the collection but that are not published by the end of the calendar year (31 December), have been applied to the Fees for each "frontlist" collection. If the Fees paid for a "frontlist" collection were greater than the value of the published titles in the collection at the end of the calendar year less the collection discount, Elsevier shall credit to the Subscriber the difference.

**Annex A to Schedule 1
Elsevier eBooks Titles**

UNIVERSITY OF CALIFORNIA, BERKELEY

ISBN	Elsevier eBooks Title
9780123743701	A Wavelet Tour of Signal Processing
9781558606593	Advanced Graphics Programming Using OpenGL
9780444522603	Analysis of Cosmetic Products
9780444532145	Battery Operated Devices and Systems
9780123740045	Bioimpedance and Bioelectricity Basics
9780444527400	Biological Inorganic Chemistry
9780240521183	Carbohydrates: The Essential Molecules of Life
9780444536211	Characterization of Liquids, Nano- and Microparticulates, and Porous Bodies using Ultrasound
9780123725066	Chemical Process Equipment
9780127655550	Column Handbook for Size Exclusion Chromatography
9781856176774	Construction Delays
9780750667555	Designing Embedded Systems with PIC Microcontrollers
9780123744982	Digital Control Engineering
9780123744906	Digital Signal Processing System Design
9780123744463	Elasticity
9780444535658	Electric and Hybrid Vehicles
9780123815439	Electrical Load Forecasting
9780750686709	Energy: Management, Supply and Conservation
9780123738653	Fiber Optic Measurement Techniques
9780080964546	Fundamental Principles of Engineering Nanometrology
9780125093903	Fundamentals of Radiation Chemistry
9780123746399	Fundamentals of Renewable Energy Processes
9780750678469	Gas Turbine Engineering Handbook
9781856176552	Generating Electricity in a Carbon-Constrained World
9780750686204	Geothermal Power Plants
9780123742674	Handbook of Digital Forensics and Investigation
9780444826695	Handbook of Dynamical Systems, Volume 1A
9780444520555	Handbook of Dynamical Systems, Volume 1B
9780444501684	Handbook of Dynamical Systems, Volume 2
9780444503305	Handbook of Mathematical Fluid Dynamics, Volume 1
9780444512871	Handbook of Mathematical Fluid Dynamics, Volume 2
9780444515568	Handbook of Mathematical Fluid Dynamics, Volume 3
9780123739049	Handbook of Medical Image Processing and Analysis
9780815520252	Handbook of Non-Invasive Drug Delivery Systems

am

ISBN	Elsevier eBooks Title
9780444535566	Handbook of Spent Hydroprocessing Catalysts
9780123747655	Handbook of Statistical Analysis and Data Mining Applications
9780815514350	Hermeticity of Electronic Packages
9780080445878	High Temperature Oxidation and Corrosion of Metals
9780750644198	Hydraulics and Pneumatics
9780080440996	Intermetallic Chemistry
9780125234757	Interpreting Infrared, Raman, and Nuclear Magnetic Resonance Spectra
9780750685603	Introduction to Continuum Mechanics
9780123744869	Introduction to Pattern Recognition: A Matlab Approach
9780750677660	Ludwig's Applied Process Design for Chemical and Petrochemical Plants
9780444531889	Mechanisms in Homogeneous and Heterogeneous Epoxidation Catalysis
9781856176323	Membrane Technology
9780123747136	Micro Fuel Cells
9780444535993	Modern Inorganic Synthetic Chemistry
9780444531148	Nanomagnetism and Spintronics
9780750681490	Nanomaterials, Nanotechnologies and Design
9780080443164	Nonlinear Magnetization Dynamics in Nanosystems
9780123705471	Nuclear Energy
9780123738929	On-Chip Communication Architectures
9781597492720	Pattern Recognition
9781884207976	Permeability Properties of Plastics and Elastomers
9780123750792	Physically Based Rendering
9780815515739	Physics of Carbon Nanotube Devices
9780750682985	Plastic Analysis and Design of Steel Structures
9781856173902	Practical Handbook of Photovoltaics: Fundamentals and Applications
9780123749574	Principles of Computer System Design
9780123704764	Probabilistic Methods for Bioinformatics
9780080548197	Properties of Polymers
9781856175678	Purification of Laboratory Chemicals
9780123746016	Quantifying and Controlling Catastrophic Risks
9780750674638	Radiochemistry and Nuclear Chemistry
9780123705228	Reconfigurable Computing
9780750666947	Reliability, Maintainability and Risk
9780123742629	Renewable Energy Conversion, Transmission, and Storage
9780123750280	Renewable Energy Systems
9780123786197	Research on Energy Issues in China
9781856178037	Reservoir Engineering Handbook
9780444533456	Rodd's Chemistry of Carbon Compounds

ISBN	Elsevier eBooks Title
9780750678773	Rotary Kilns
9780444533470	Second Supplements to the 2nd Edition of Rodd's Chemistry of Carbon Compounds
9780444532404	Semiconductors and the Information Revolution
9780123748997	Smart Things: Ubiquitous Computing User Experience Design
9780123747747	Solar Cell Device Physics
9780123745019	Solar Energy Engineering
9780080451183	Stationary Fuel Cells: An Overview
9780444533463	Supplements to the 2nd Edition of Rodd's Chemistry of Carbon Compounds
9780444531155	Sustainable Water for the Future
9780444503510	The Chemistry and Technology of Furfural and its Many By-Products
9780124414556	The Spectra and Dynamics of Diatomic Molecules
9780123749406	The Theory of Gambling and Statistical Logic
9780444530288	Thermodynamics of Non-Equilibrium Processes for Chemists with a Particular Application to Catalysis
9780815515968	Thermophysical Properties of Chemicals and Hydrocarbons
9780123743435	Three-dimensional Integrated Circuit Design
9780123708694	Tissue Engineering
9780815520399	Transport Properties of Chemicals and Hydrocarbons
9780815515357	Vacuum Deposition onto Webs, Films, and Foils
9780123706164	Verification Techniques for System-Level Design
9780444521187	Writing and Presenting in English
9780124967120	Writing Reaction Mechanisms in Organic Chemistry