

Categorie ISI-CRUI

- **AI, Robotics & Automatic Control**

The AI, Robotics & Automatic Control category is concerned with resources on the research and techniques of artificial intelligence; that is, the creation of machines that exhibit characteristics of human intelligence (e.g., efficient representation of knowledge, reasoning, deduction, problem solving, heuristics, and analysis of contradictory or ambiguous information). Related AI technologies include expert systems, fuzzy systems, natural language processing, speech and pattern recognition, computer vision, decision-support systems, knowledge-bases, and neural networks. Robotics resources are concerned with the design, construction, and operation of robots. Automatic Control resources cover the design and development of regulating processes and systems that replace the necessity of human intervention. Topics include adaptive control, robust control, discrete-event control, dynamic control, fuzzy control, and optimal control. Cybernetics resources are concerned with the control and communication within and between artificial (machine) systems and living or natural systems.

- **Aerospace Engineering**

The Aerospace Engineering category covers engineering-based resources in astronautics, aeronautics, aerospace, and aviation. Topics include the design and construction of aircraft, space vehicles, missiles, satellites, instrumentation, and power units, as well as the launch, flight, and guidance of crafts in the earth's atmosphere or in space.

- **Agricultural Chemistry**

Resources in the Agricultural Chemistry category cover many aspects of chemistry related to disciplines in CC/AB&ES, including agrochemistry, agricultural biochemistry, food chemistry, analytical chemistry, cereal chemistry, and carbohydrate and lipid research.

- **Agriculture/Agronomy**

Resources in the Agriculture/Agronomy category cover a number of agricultural sciences, including general agriculture, agricultural economics, agricultural engineering, agronomy, tillage research, agroforestry, horticulture, and crop protection and science.

- **Anesthesia & Intensive Care**

The Anesthesia & Intensive Care category covers resources concerned with all aspects of anesthesia including the delivery and administration of anesthetics, emergency medicine, critical care medicine, traumatology, burns, injury, and resuscitation.

- **Animal & Plant Sciences**

Animal & Plant Sciences covers resources in animal science, which focus on laboratory animal science and zoology; the plant science resources cover cellular and molecular biology or physiology of plant cells and plant systems. Topics include molecular biology, molecular genetics, plant-microbe interactions, physiology and cell biology, and biochemistry. A limited number of botany and general plant biology resources are also included. Resources on veterinary medicine and veterinary science, husbandry, and general zoology are excluded.

- **Animal Sciences**

Resources in the Animal Sciences category cover basic animal science, animal behavior, animal production science, poultry science, wildlife research, lab animal science, and zoology. Also covered are sub-disciplines of zoology such as primatology, mammalogy, herpetology, nematology, and malacology.

- **Applied Physics/Condensed Matter/Materials Science**

Applied Physics/Condensed Matter/Materials Science encompasses the resources of three related disciplines: Applied Physics, Condensed Matter Physics, and Materials Science. The applied physics resources are concerned with the applications of topics in condensed matter as well as optics, vacuum science, lasers, electronics, cryogenics, magnets and magnetism, acoustical physics and mechanics. The condensed matter physics resources are concerned with the study of the structure and the thermal, mechanical, electrical, magnetic and optical properties of condensed matter. They include superconductivity, surfaces, interfaces, thin films, dielectrics, ferroelectrics and semiconductors. The materials science resources are concerned with the physics and chemistry of materials and include ceramics, composites, alloys, metals and metallurgy, nanotechnology, nuclear materials, adhesion and adhesives. Resources dealing with polymeric materials are listed in the Organic Chemistry/Polymer Science category.

- **Aquatic Sciences**

The Aquatic Sciences category covers resources from many water-related-fields, including discipline-specific aquatic sciences such as aquatic botany and toxicology, phycology, and marine ecology. Also covered are resources concerned with marine and freshwater biology, fisheries science, aquaculture, and oceanography.

- **Archaeology**

Archaeology covers resources on the study of material remains (such as fossils, relics, artifacts, and monuments) of past human life and activities including methods of detection and analysis.

- **Art & Architecture**

Art & Architecture includes resources dealing with all areas of art (e.g., graphics, printmaking, painting, sculpture, and photography) as well as art history and museum management. Architecture resources covered in this category are concerned with architectural history, planning and design, and landscape architecture.

- **Biochemistry & Biophysics**

Biochemistry & Biophysics focuses on the structure and chemistry of biomolecules and covers all aspects of basic biochemistry/biophysics, including molecular structure, enzyme kinetics and protein-protein interaction; this category also contains cross-disciplinary resources focused on a specific class of biological molecules, e.g., nucleic acids, steroids, magnesium, growth factors, free radicals, bio-membranes, and peptides. Excluded are resources dealing with the application of biochemical techniques to specific topics listed elsewhere in CC/LS. Resources with a strong emphasis on the integration of biochemical pathways (such as signal transduction or molecular motors) at the cellular level are placed in the Cell & Developmental Biology category.

- **Biology**

The Biology category includes resources that individually cover a broad range of topics in the biological sciences. Resources covering specific areas in biology, such as general microbiology, protozoology, parasitology, biometrics, biological education, heredity, and evolutionary biology are also placed in this category.

- **Biotechnology & Applied Microbiology**

The Biotechnology & Applied Microbiology category includes resources on a number of subjects that relate to the exploitation of living organisms or their components. In CC/AB&ES, the emphasis is on applied biology, including industrial microbiology. Applications include industrial chemicals and enzymes, biosensors, bioelectronics, pesticide development, food, flavor and fragrance industry applications, waste treatment, and pollution bioremediation.

- **Cardiovascular & Hematology Research**

Cardiovascular & Hematology Research covers all levels of investigation into the normal and pathogenic functions of the heart, vasculature, and soluble blood components. Cell biology of vascular tissue and formed elements of blood, biochemical regulation of thrombosis, therapeutic strategies for treatment of cardiac and vascular diseases are also considered. Resources on hematologic oncology are excluded and are placed in the Oncogenesis & Cancer Research category.

- **Cardiovascular & Respiratory Systems**

The Cardiovascular & Respiratory Systems category covers resources concerned with all aspects of cardiovascular and thoracic surgery and respiratory diseases. Topics include circulation, cardiovascular technology and measurement, cardiovascular pharmacology and therapy, hypertension, heart and lung transplantation, arteries, arteriosclerosis, thrombosis, angiology, perfusion, stroke, as well as all types of respiratory and lung diseases.

- **Cell & Developmental Biology**

Cell & Developmental Biology contains resources in biochemistry, molecular biology, biophysics, physiology, and pharmacology that have a specific emphasis on cellular function in eukaryotic systems. Topics of particular importance include receptor biology and signal transduction, regulation of gene expression at the cellular level, developmental genetics, developmental biology and morphogenesis, and cell-environment interactions. Resources concentrated on molecular biochemistry and molecular regulation of gene expression, as well as microscopic or histological analysis of cell or tissue samples are excluded.

- **Chemical Engineering**

Chemical Engineering covers the engineering-based literature in the disciplines of applied chemistry, industrial chemistry, and chemical engineering. These resources are concerned with the development and application of manufacturing processes that chemically convert raw materials into a variety of products. This category also includes resources that cover the design and operation of plants and equipment to perform such work.

- **Chemistry**

The Chemistry category includes resources that are general in nature and cover a broad spectrum of topics in the chemical sciences. Resources specifically covering analytical chemistry, inorganic and nuclear chemistry, organic chemistry, physical chemistry, and polymer science will be placed in those particular categories.

Miscellaneous and applied chemistry resources may be placed in this category when not appropriate for specific subfields in chemistry.

- **Chemistry & Analysis**

Chemistry & Analysis covers research on natural and laboratory syntheses, chemical structure, structure-function relationship, isolation and analyses of biologically significant molecules, medicinal and food chemistry. Technical material describing crucial chemical methods in biochemical analysis and research is also placed in this category. Resources covering general biochemistry and natural metabolic pathways are excluded.

- **Civil Engineering**

Civil Engineering covers engineering-based resources in the subfields of structural engineering, geotechnics, earthquake engineering, ocean engineering, water resources and supply, naval engineering, marine engineering, transportation engineering, and municipal engineering. Topics covered include the planning, design, construction, and maintenance of fixed structures and ground facilities for industry, occupancy, transportation, use and control of water, and harbor facilities.

- **Classical Studies**

Classical Studies includes resources on the literature of the classical era of the Greek and Roman civilizations.

- **Clinical Immunology & Infectious Disease**

The Clinical Immunology & Infectious Diseases category covers resources that focus on basic research in clinical and applied allergy, immunology, and infectious disease. Microbiology and virology resources are included in this category as are resources on HIV, AIDS, sexually transmitted diseases (STDs), and hospital infections.

- **Clinical Psychology & Psychiatry**

The Clinical Psychology & Psychiatry category covers resources concerned with the diagnosis, treatment, and prevention of mental illness. Topics covered include general psychiatry, psychological medicine, substance abuse and addiction (e.g., alcoholism), psychosomatics, stress, behavioral medicine, and psychopathology. Emphasis is on medical/biological mechanisms rather than social aspects.

- **Communication**

Communication includes resources on the verbal and non-verbal exchange of information, including communication theory, mass media, public opinion and public relations, speech, technical writing, marketing and advertising.

- **Computer Science & Engineering**

Computer Science & Engineering includes resources on computer hardware and architecture, computer software, software engineering and design, computer graphics, programming languages, theoretical computing, computing methodologies, broad computing topics, and interdisciplinary computer applications.

- **Dentistry/Oral Surgery & Medicine**

The Dentistry/Oral Surgery & Medicine category covers resources concerned with all aspects of dental science and practice including dental implants and dental materials. Specialties such as orthodontics, periodontology, endodontics, prosthodontics, and pediatric dentistry are also included. Oral Surgery & Medicine resources are concerned with basic, applied, and clinical aspects of oral infections and diseases, including their epidemiology, diagnosis, treatment, and rehabilitation. Specialties such as oral pathology/biology, oral epidemiology, oral rehabilitation, and oral implants are also included. Facial pain and craniomandibular resources are also covered in this category.

- **Dermatology**

The Dermatology category covers resources concerned with all aspects of the skin and its diseases, including general, investigative, and experimental dermatology. Topics include contact dermatitis, venereal disease, leprosy, dermatologic surgery, dermatologic pathology, and dermatologic oncology, as well as material on the care of burns and wounds.

- **Earth Sciences**

The Earth Sciences category includes resources that deal with all aspects of geosciences, including geology, geochemistry, geophysics, mineralogy, meteorology and atmospheric sciences, hydrology, oceanography, petroleum geology, volcanology, seismology, climatology, paleontology, geography, remote sensing, and geodesy.

- **Economics**

Economics covers resources in a broad range of specialties, including theoretical, political, and agricultural economics, macroeconomics and econometrics. Also included are business and finance resources.

- **Education**

Education covers resources on both theoretical and practical educational issues including special education.

- **Electrical & Electronics Engineering**

The Electrical and Electronics Engineering category covers resources concerned with applications of electricity, generally those involving current flow through conductors, as in motors and generators. This category also covers the examination of the conduction of electricity through gases or a vacuum as well as through semiconducting materials. Topics include image and signal processing, electromagnetics, electronic components and materials, microwave technology, and microelectronics.

- **Endocrinology, Metabolism & Nutrition**

The Endocrinology, Metabolism & Nutrition category is concerned with resources on the growth and regulation of the human body. Coverage focuses on disorders associated with endocrine glands such as diabetes, osteoporosis, and obesity. Nutrition resources focus on topics such as diagnosis, treatment, and management of nutritional and metabolic disorders. Reproductive endocrinology is excluded and is placed in the Reproductive Medicine category.

- **Endocrinology, Nutrition & Metabolism**

Endocrinology, Nutrition & Metabolism is a cross-disciplinary category combining molecular, cellular and clinical science studies of the endocrine glands, and the regulation of cell, organ, and system function by the action of secreted hormones. Chemical/biological properties of hormones, and the pathogenesis and treatment of disorders associated with either source or target organs are also covered. Nutrition coverage includes biochemical characteristics of nutrients, physiology of absorption, biological trace elements, clinical nutrition and malnutrition, and the biomedicine of obesity. Specific areas of interest include reproductive endocrinology, pancreatic hormones and diabetes, regulation of bone formation and loss, and control of growth. Resources focusing on neuroendocrinology are excluded and are placed in the Neuroscience & Behavior category.

- **Engineering Management/General**

Engineering Management/General covers resources on engineering systems that integrate people, materials, capital, and equipment to provide products and services. Topics include planning the production process and predicting and evaluating results. This category also includes resources that cover multiple engineering disciplines.

- **Engineering Mathematics**

Engineering Mathematics covers resources on applied mathematics, mathematical modelling, combinatorics, optimization techniques, numerical methods, and statistical methods that have an emphasis on engineering systems.

- **Entomology/Pest Control**

Resources in the Entomology/Pest Control category include, among other topics, general entomology, applied entomology, regional entomology, apiculture, aquatic insects, insect biochemistry and physiology, economic entomology, integrated pest management (IPM), and pesticide science.

- **Environment/Ecology**

Environment/Ecology is a broad category covering interrelated disciplines. It includes resources dealing with pure and applied ecology, ecological modelling and engineering, ecotoxicology, and evolutionary ecology. In environmental science, some of the many areas covered are environmental contamination and toxicology, environmental health, monitoring, technology, geology, and management. Other fields covered are soil science and conservation, water resources research and engineering, climate change, and biodiversity conservation. Regional naturalist resources are also covered here.

- **Environmental Engineering & Energy**

Environmental Engineering/Energy covers resources concerned with the effects of humans on the environment, and the development of controls to minimize environmental degradation. This category also covers the development, production, use, application, conversion, and management of nonrenewable and renewable energy sources.

- **Environmental Medicine & Public Health**

The Environmental Medicine & Public Health category includes resources concerned with hygiene and health, parasitic diseases and parasitology, tropical medicine, industrial medicine, occupational medicine, infection control, and

preventive medicine. Also included are resources on environmental health (including aerosol) and cancer causes and control. Aviation and wilderness medicine journals are placed here as well.

- **Environmental Studies, Geography & Development**

Environmental Studies, Geography & Development includes resources that examine the relationship between humans and the environment, both natural and fabricated. Subjects covered include environmental behavior, leisure studies, tourism, regional studies, urban planning, human and political geography, cartography, resource development, disaster management and cultural change.

- **Experimental Biology**

Experimental Biology covers a wide array of topics concerned with research in general biology and biological systems, including evolution, ecology, radiation biology, anatomy, general biology, and resources containing diverse topics in basic biology research. Resources on general biomedicine are excluded and are covered in the Medical Research: General Topics category. Resources with strong reliance on fields that fall outside of the core topics of Life sciences, such as biomedical engineering are placed in the Multidisciplinary category.

- **Food Science/Nutrition**

The Food Science/Nutrition category includes resources in food science covering topics such as food additives and contaminants, food chemistry and biochemistry, food microbiology, technology, engineering, processing, quality, and safety. Also covered are meat science, dairy science, and brewing. The closely related area of nutrition is also covered in this category, including general nutrition, nutrition and metabolism, nutrition science, nutritional biochemistry, and dietetics.

- **Gastroenterology and Hepatology**

The Gastroenterology and Hepatology category covers general and investigative gastroenterology and hepatology resources including those concerned with the structure, function, and diseases of the digestive system, stomach, intestines, colon, rectum, and the liver.

- **General & Internal Medicine**

(area 06) The General & Internal Medicine category covers resources on medical specialties such as general medicine, family medicine, internal medicine, clinical

physiology, pain management medicine, geriatric medicine, military medicine, and hospital medicine.

- **General Humanities**

General covers resources on two or more topics pertaining to creative, artistic, philosophical, or historical expression and on records, documents, works, or artifacts produced by these endeavors, such as collections of a particular library.

- **Geological, Petroleum, & Mining Engineering**

Geological/Petroleum/Mining Engineering covers resources concerned with geotechnics, economic geology, and geological studies applicable to mining or petroleum engineering or the development and conservation of natural power and resources. Coverage is limited to the engineering aspects of natural hazards, geochemistry, geophysics, hydrology, and atmospheric sciences. The petroleum engineering resources cover petroleum geology, petrochemistry, formation evaluation, reservoir engineering, drilling, operations, production, and refining of petroleum-based fuels and products. The mining engineering resources cover the location and evaluation of mineral deposits; the layout and equipment of mines; the supervision of mining operations; and the cleaning, sizing, and dressing of the mined product.

- **Health Care Sciences & Services**

The Health Care Sciences & Services category includes resources on health services, hospital administration, health-care management, health-care financing, health policy and planning, health education, history of medicine, medical ethics, palliative care and nursing, integrative and complementary medicine, and nursing.

- **Hematology**

The Hematology category covers resources concerned with blood, blood-forming tissues, bone marrow, plasma, and transfusions. Coverage also includes resources on specialties such as hemophilia, leukemia, and lymphoma.

- **History**

History includes resources on all areas of history -- world, national, regional, ethnic, social, military, nautical, and the history of science.

- **Immunology**

Immunology incorporates cellular and molecular studies in immunology, as well as clinical research in immunopathology, infectious disease, autoimmunity, and allergy. Host-pathogen interactions in infectious disease, as well as experimental therapeutic applications of immunomodulating agents are also considered. Resources dealing primarily with the biology of microbial, viral, or parasitic pathogens are excluded and are covered in the Microbiology category.

- **Information Technology & Communications Systems**

Information Systems & Communications Technology covers resources concerned with the technical aspects of information systems and information technology, including the acquisition, processing, storage, management, and dissemination of information. This category also covers the technical aspects of communications via various devices and systems.

- **Inorganic & Nuclear Chemistry**

The Inorganic & Nuclear Chemistry category includes resources concerned with elements other than carbon and with the preparation, properties, and reactions of their compounds. Certain simple carbon compounds are treated in inorganic chemistry, including the oxides, carbon disulfide, the halides, hydrogen cyanide, and salts, such as the cyanides, cyanates, carbonates and hydrogencarbonates. Resources dealing with coordination chemistry and organo-metallic compounds (those containing a carbon-metal bond) are also included in this field. Resources dealing with nuclear chemistry, including fission and fusion reactions and their products are placed here. Radiochemistry is also covered in this category and includes such topics as the preparation of radioactive compounds, the separation of isotopes by chemical reactions, the use of radioactive labels in studies of mechanisms, and experiments on the chemical reactions and compounds of transuranic elements.

- **Instrumentation & Measurement**

Instrumentation/Measurement covers resources concerned with the development, manufacture, and application of instruments, especially for observation and measurement. Broad and specialized instrumentation resources (e.g., sensors, actuators, spectrometers, flow meters, etc.) and measurement and standards resources are included.

- **Language & Linguistics**

Language & Linguistics covers resources concerned with the theoretical, descriptive, and historical aspects of linguistics.

- **Law**

Law covers resources from both general and specialized areas of national and international law, including comparative law, criminology, business law, banking, corporate and tax law, constitutional law, civil rights, copyright and intellectual property law, environmental law, family law, medicine and the law as well as psychology and the law.

- **Library & Information Sciences**

Library & Information Sciences covers resources on all areas of information and library science from the academic to the professional including online services, CD-ROM, and Internet information sources; computerized methods; serials librarianship; cataloguing and bibliography; special libraries and library automation; and documentation studies.

- **Literature**

Literature covers resources on every genre, literary movement and era in literary history, and specialty literature, including African, American, Australian, British, Canadian, German, Dutch, Romance, Scandinavian, and Slavic. Also included in this category are resources on literary reviews, folklore, and poetry.

- **Management**

Management covers resources on management and organizational science, strategic planning and decision-making methods, industrial relations and labor.

- **Materials Science & Engineering**

Materials Science and Engineering is concerned with admixtures of matter or the basic matter from which products are made. The category covers ceramics, paper and wood products, polymers, textiles, composites, coatings & films, and biomaterials. Other areas covered in this category include Materials Chemistry, the application of chemistry to materials design and testing; Condensed Matter/Solid State Physics, the branch of physics concerned with the structure and properties of condensed matter (superconductors, semiconductors, ferroelectrics, and dielectrics); and Physical Chemistry/Chemical Physics, the application of the concepts and laws of physics to chemical phenomena.

- **Mathematics**

The Mathematics category includes resources dealing with mathematics, applied mathematics, statistics and probability.

- **Mechanical Engineering**

Mechanical Engineering covers resources concerned with the generation, transmission, and utilization of heat and mechanical power, and with the production and operation of tools, machinery, and their products. Topics include heat transfer, fatigue and fracture, wear, tribology, hydraulics, pneumatics, plasticity, strain analysis, and aerosol technology.

- **Medical Research, Diagnosis & Treatment**

Medical Research, Diagnosis & Treatment contains studies of existing and developing diagnostic and therapeutic techniques, as well as specific classes of clinical intervention. Resources in this category emphasize the difference between normal and disease states, with the ultimate goal of more effective diagnosis and intervention. Specific areas of interest include pathology and histochemical analysis of tissue, clinical chemistry and biochemical analysis of medical samples, diagnostic imaging, radiology and radiation, surgical research, anesthesiology and anesthesia, transplantation, artificial tissues, and medical implants. Resources focused on the disease, diagnosis, and treatment of specific organs or physiological systems are excluded and are covered in the Medical Research: Organs & Systems category.

- **Medical Research, General Topics**

Medical Research, General Topics covers a wide array of topics in medical and biomedical research, with a specific emphasis on human disease, human tissues, and all levels of research into the pathogenesis of clinically significant conditions. Specific medical fields that are characterized by the inclusion of material from several other specializations are also covered here; these include general and internal medicine, tropical medicine, pediatrics, gerontology, epidemiology, and public health. Resources dealing with specific clinical interventions are excluded and are placed in the Medical Research: Diagnosis & Treatment category. Resources that emphasize the specific disease types, or specific systems affected are also excluded and are categorized according to the pathogen or system pathophysiology.

- **Medical Research, Organs & Systems**

Medical Research, Organs & Systems includes resources dealing with the normal and disease states of single organs, tissues, or single physiological systems, exclusive of the heart, vascular and immune systems. Systems covered here include hepatology, pulmonary function/physiology, gastroenterology, otolaryngology, respiratory system, andrology, gynecology and reproduction, dermatology, and dentistry/odontology. Resources dealing with general physiology, classes of disease

that immediately affect many or all body systems, and medical research focused on specific types of medical intervention are excluded.

- **Metallurgy**

Metallurgy covers journals concerned with the production of metals and alloys, their adaptation to use, and their performance in service. This category also covers resources on the study of chemical reactions involved in the processes by which metals are produced.

- **Microbiology**

Microbiology covers the biology and biochemistry of microorganisms, bacterial, viral, and parasitic, as well as the medical implications and treatments of the subset of these organisms known to cause disease in humans and/or animals. Biotechnology applications of microorganisms for basic science or clinical use are also covered. Resources that emphasize immune response to pathogens and its modulation by clinical intervention are excluded and are covered in the Immunology category.

- **Molecular Biology & Genetics**

Molecular Biology & Genetics considers all aspects of basic and applied genetics, including molecular genetics, prokaryotic and eukaryotic gene expression, mechanisms of mutagenesis, structure, function and regulation of genetic material. Also included are resources concerned with clinical genetics, patterns of inheritance, genetic cause, and screening and treatment of disease. Resources dealing specifically with developmentally regulated gene expression, or with signal transduction pathways that modulate gene expression at the cellular level are excluded and are covered in the Cell and Developmental Biology category.

- **Neurology**

The Neurology category covers resources concerned with the central and peripheral nervous system including the brain, spinal cord, nerves, and fluids. Coverage includes general and clinical neurology including neurosurgery, neuropsychiatry, neuropsychology, neurophysiology, neuroradiology, neuropediatrics, neuropathology, and neurobiology. Resources on cerebrovascular diseases, movement and spinal disorders, pain, dementia, headache, aphasiology, brain injury, paraplegia, stroke, and acupuncture are also included.

- **Neurosciences & Behavior**

Neurosciences & Behavior covers cellular and molecular neuroscience, neuronal development, basic and clinical neurology, psychology, psychiatry, and psychopharmacology. This category also includes experimental and biobehavioral psychology, molecular psychiatry, and studies of neuronal function underlying higher cognitive processes. Resources dealing with cognitive or behavioral clinical psychotherapy, psychological assessments, and case-books in clinical neurology are excluded.

- **Nuclear Engineering**

Nuclear Engineering covers resources concerned with the branch of engineering that deals with the production and use of nuclear energy, including the development, design, construction, and operation of power plants that convert energy produced by fission or fusion to other useful forms of energy such as heat and light.

- **Oncogenesis & Cancer Research**

Oncogenesis & Cancer Research covers research into all aspects of tumorigenesis in vitro as well as the occurrence and pathogenesis of cancer. Emphasis is placed on molecular regulation of cell growth, oncogene expression/function in normal and transformed cells, mechanisms of anti-cancer drug action, and experimental therapeutics. Excluded from this category are resources dealing with the treatment of cancer in humans. Resources concerned with cell growth and differentiation without specific application to mechanisms of oncogenesis are excluded; this material is covered in the Cell & Developmental Biology category.

- **Oncology**

The Oncology category covers resources on the etiology, prevention, diagnosis, and treatment of cancer such as chemotherapy, radiation and gene therapy. Cancer specialties such as gynecologic oncology, neuro-oncology, surgical oncology, radiological oncology, oral oncology and dermatological oncology are also included.

- **Ophthalmology**

The Ophthalmology category covers resources on clinical research and medicine in ophthalmology, and diseases of the eye. Resources on physiological optics and optometry as well as reconstructive surgery are included.

- **Optics & Acoustics**

Optics & Acoustics includes resources concerned with light, its genesis and propagation, and the effects that it undergoes and produces. This category also

covers the production, transmission, and effects of sound, including general acoustics, linear and non-linear acoustics, atmospheric and underwater sound, mechanical vibrations, shock, and noise and its effects.

- **Organic Chemistry/Polymer Science**

The Organic Chemistry/Polymer Science category includes resources concerned with the related fields of organic chemistry and polymer science. The organic chemistry resources deal with compounds of carbon with the exception of certain simple ones, such as the carbon oxides, carbonates, cyanides and cyanates (see Inorganic & Nuclear Chemistry). This category includes research on synthetic and natural organic compounds that may include other elements, such as hydrogen and oxygen, but also nitrogen, halogens, sulphur and phosphorous. Resources concerned with hydrocarbons, organic compounds containing only the elements carbon and hydrogen, are also included in this category. Examples are the alkanes, alkenes, alkynes and aromatics, such as benzene and naphthalene. Polymer science includes all resources dealing with the study, production and technology of polymers, which are compounds composed of very large molecules made up of repeating molecular units (monomers). Polymers may be natural substances, such as polysaccharides or proteins, or synthetic materials, such as nylon or polyethylene.

- **Orthopedics, Rehabilitation & Sports Medicine**

The Orthopedics, Rehabilitation & Sports Medicine category covers resources on general orthopedics, physical medicine and rehabilitation, podiatric medicine, and sports medicine. Coverage also includes resources on arthroscopy; hand, foot, shoulder, elbow, knee, and ankle surgeries, prosthetics and orthotics; and biomechanics.

- **Otolaryngology**

The Otolaryngology category covers resources concerned with research of the ears, nose and throat, as well as head and neck surgery. Audiology and voice are also covered by this category.

- **Pediatrics**

The Pediatrics category covers resources on all aspects of clinical medicine in pediatrics. Pediatric specialties including cardiology, dermatology, gastroenterology, hematology, immunology and infectious diseases, neurology, nutrition, oncology, psychiatry, surgery, tropical medicine, urology, and nephrology are also included. Resources concerned with neonatology and adolescent medicine are also covered.

- **Performing Arts**

Performing Arts includes resources on the study of dance, film, music, radio, television, and theater.

- **Pharmacology & Toxicology**

Pharmacology & Toxicology includes all aspects of pharmacology, toxicology, and pharmaceuticals. Of particular importance are cellular and molecular pharmacology, drug design and metabolism, mechanisms of drug action, drug delivery, natural products, xenobiotics, and clinical therapeutics. Toxicology coverage considers cellular and molecular effects of harmful substances, environmental toxicology, occupational exposure, and clinical toxicology. Drug bulletins, drug updates, and pharmaceutical newsletters are excluded as are resources on pharmaceutical engineering. Medicinal chemistry, or synthesis and chemical analysis of pharmaceuticals are placed in the Chemistry & Analysis category.

- **Pharmacology/Toxicology**

The Pharmacology/Toxicology category covers resources on all aspects of clinical pharmacology and toxicology including psycho-pharmacology, pharmacokinetics, pharmacotherapy, drug monitoring and drug safety, chemotherapy, clinical and hospital pharmacy, and clinical trials.

- **Philosophy**

Philosophy covers resources on every branch of philosophy, including aesthetics, ethics, metaphysics, and the philosophy of science.

- **Physical Chemistry/Chemical Physics**

The Physical Chemistry/Chemical Physics category includes resources on photochemistry, solid state chemistry, kinetics, catalysis, quantum chemistry, surface chemistry, electro-chemistry, chemical thermodynamics, thermo-physics, colloids, fullerenes and zeolites. Resources dealing with (liquid) crystals and crystallography are also included in this category. This category also includes resources on atomic, molecular and chemical physics, which concerns the structure of atoms and molecules, atomic and molecular interactions with radiation, magnetic resonance and relaxation, Mossbauer effect, and atomic and molecular collision processes and interactions.

- **Physics**

The Physics category includes resources of a broad, general nature that contain materials from all areas of physics, The category also includes resources specifically concerned with the following physics sub-fields: mathematical physics, particle and nuclear physics, physics of fluids and plasmas, quantum physics, and theoretical physics.

- **Physiology**

Physiology considers resources that study the regulation of biological functions at the level of the whole organism. This includes research from biochemical, cell biological and whole system studies of human and animal physiology. Comparative physiology, biological rhythms, and physiological measurement are also included. Resources emphasizing cellular regulation, or the physiology of specific organs are excluded and are covered in the Cell & Developmental Biology and Medical Research: Organs & Systems categories.

- **Plant Sciences**

The Plant Sciences category covers many areas, including broad botany resources, regional botany, mycology, bryology, plant physiology, forestry, weed science, plant pathology, economic botany, plant nutrition, photosynthesis research, experimental botany, and plant cell research.

- **Political Science & Public Administration**

Political Science & Public Administration includes resources on all aspects of political science, both domestic and international as well as public administration.

- **Psychiatry**

Psychiatry includes resources concerned with social aspects of mental and emotional disorders.

- **Psychology**

Psychology covers resources on all areas of psychology, including applied, biological, clinical, developmental, educational, mathematical, organizational, experimental and social.

- **Public Health & Health Care Science**

Public Health & Health Care Science includes resources on public health, nursing, health services, hospital administration, health care management, biomedical ethics, gerontology, and substance abuse.

- **Radiology, Nuclear Medicine & Imaging**

The Radiology, Nuclear Medicine & Imaging category includes resources on general radiology, nuclear medicine, and medical imaging. Specialties such as magnetic resonance imaging (MRI), computed tomography (CT), sonography, and medical imaging topics (e.g., abdominal and cardiovascular imaging) are also covered.

- **Rehabilitation**

Rehabilitation includes resources dealing with therapeutic approaches to developmental disabilities: mental, speech, hearing, visual and other physical disorders. Studies in music, art, dance, and occupational therapy are also included here.

- **Religion & Theology**

Religion & Theology covers resources on all aspects of religion and theology, including major world religions, spirituality, the history and sociology of religion, and biblical studies.

- **Reproductive Medicine**

The Reproductive Medicine category includes resources on all medical aspects of human reproduction and medicine. Emphasis is on obstetrics and gynecology, and reproductive endocrinology. Specialties including fertility, sterility, perinatology, assisted reproduction, contraception, genitourinary medicine, gynecologic surgery, gynecologic oncology, and gynecologic pathology are also covered here.

- **Research/Laboratory Medicine & Medical Technology**

The Research/Laboratory Medicine & Medical Technology category includes resources on pathology, forensic sciences, medical genetics, biotechnology, and biomedical engineering. Coverage also includes clinical monitoring and computing devices; medical instrumentation; and artificial organs, medical implants, and other emerging medical treatments.

- **Rheumatology**

The Rheumatology category covers resources on clinical, laboratory, and therapeutic research in all aspects of rheumatology including arthritis and rheumatism.

- **Social Work & Social Policy**

Social Work & Social Policy includes resources from a variety of areas such as criminology, penology, social issues, and social work.

- **Sociology & Anthropology**

Sociology & Anthropology includes resources that focus on human behavior shaped by social forces and the study of the history of human civilizations. Areas covered include demography, ethnic studies, family studies, women's studies, and social ethics.

- **Space Science**

The Space Science category includes resources dealing with all areas of astronomy and astrophysics, which are concerned with celestial bodies and the observation and interpretation of radiation received in the vicinity of the Earth from the component parts of the universe. These resources deal with the physical properties of celestial bodies, such as luminosity, size, mass, density, temperature, chemical composition and their origin and evolution. Planetary science may also be included in this CC category.

- **Spectroscopy/Instrumentation/Analytical Sciences**

Spectroscopy/Instrumentation/Analytical Sciences includes all resources concerned with spectroscopy, instrumentation and analytical sciences. The spectroscopy resources covered here are concerned with a technique involving the production, measurement and interpretation of electromagnetic spectra arising from either emission or absorption of radiant energy by various sources. The instrumentation resources deal with the application of instruments for observation, measurement or control of physical and/or chemical systems. The analytical chemistry resources deal with techniques that yield any type of information about chemical systems and include chromatography, chemometrics, thermal analysis, electroanalysis, pyrolysis, and separation science.

- **Surgery**

The Surgery category covers resources on surgery, organ transplantation, plastic and reconstructive surgery, microsurgery, minimally invasive surgery, trauma surgery,

surgical pathology, and surgical technology. Surgical specialties, such as surgical endoscopy, lasers in surgery, and obesity surgery are also included.

- **Urology & Nephrology**

The Urology & Nephrology category covers general urology and nephrology resources, specialty resources on the prostate, dialysis and other blood purification techniques, transplantation and renal failure.

- **Veterinary Medicine/Animal Health**

The Veterinary Medicine/Animal Health category includes general veterinary medicine resources, regional veterinary medicine resources, practice resources (avian, canine, feline, equine, food animal), and zoo and wildlife medicine. This includes such topics as veterinary internal medicine, veterinary microbiology, parasitology, surgery, radiology, and immunology.