- imprégné(e) impregnated, which has been penetrated by another body; said of a mineral deposit in which the minerals are epigenetic and diffuse in the host rock.
- impression f impression, mark left by the weight of an object; imprint more or less deep depression on the inside face of the valves of bivalves and brachiopods. impression musculaire: muscle scar, or muscle mark; area on the inner surface of a bivalve shell where former muscle attachments are indicated by impressions or elevations.
- **imprévisibilité** f unpredictability, that cannot be foreseen
- imprimé(e) impressed, marked by an impression; ingrown, said of incised meanders.
- **improbabilité** f improbability, nature of an event that has little chance of occurring.
- **impsonite** f impsonite, a black variety of asphaltic pyrobitumen.
- **impulsion** *f* impulse; pulse, a waveform whose duration is short compared to the time scale of interest.
- **impulsionnel(le)** impulsive, producing very sharp waves of short duration.
- impur(e) impure.
- impureté f impurity, substance accidentally present in a body; see also contamination. impureté stœchiométrique: stoichiometric impurity, deviating from the ideal composition of a crystal.
- inactuel(le) relict, said of landforms that remain after other topographic features have disappeared.
- inadapté(e) misfit.
- inadunate m inadunate, fossil crinoid having arms free from the firmly jointed calyx plate and a mouth underneath the tegmen, belonging to the subclass Inadunata.
- inaltéré(e) unweathered, said of a rock not having undergone surface erosion.
- inaperturé(e) inaperturate, said of spores or pollen grains lacking germinal pores.
- inarticulé m inarticulate, brachiopod having shell valves connected by muscles rather than hinge teeth, belonging to the class Inarticulata.
- **Inayaien** *m* Inayaian, Lower Ordovician stage in Asiatic Russia, equivalent to the Tremadoc (local term).
- **incandescence** *f* incandescence, *emission* of *light* by a body raised to a high temperature.
- incandescent(e) glowing; incandescent, heated to the point of becoming luminous.
- Inceptisol m Inceptisol, taxonomic soil order (USDA) in which minerals other than amorphous silica or carbonates have been altered or removed from the pedogenic horizon without any significant accumulation.
- incertae sedis incertae sedis, "of uncertain place"; a Latin term applied to a fossil whose classification is regarded as uncertain.
- incertain(e) uncertain, resulting from uncertainty.
- incertitude f uncertainty, state of something that cannot be determined exactly. incertitude sur l'âge: uncertainty of age, see also principe d'incertitude.
- incidence f = incidence, occurrence, effect. incidence
  des vagues : wave incidence, angle at which waves
  hit the shore.

- incipient(e) incipient, starting, commencing, initial. phase incipiente: incipient phase, start of accelerated morphogenesis.
- incisé(e) incised.
- **incision** f incision, cut, gash, the downcutting of a stream.
- inclassable unclassifiable, that cannot be included in a classification.
- inclinaison f cant; declivity; dip; dipping; hade; inclination, angle made by a structure with the horizontal surface of the ground; angle formed by the direction of the Earth's magnetic field with the horizontal plane; incline; pitch; slant; tilt; tilting. inclinaison de faille: fault dip. inclinaison magnétique: dip of the needle; magnetic dip, angle at which a magnetic field dips from the horizontal; magnetic inclinaion. inclinaison originelle: original dip. inclinaison primaire: primary dip, original dip, depositional dip; assumed dip of a deposit at its moment of deposition.
- incliné(e) dipping; inclined; pitching; slant, or slanting; tilted; upturned.
- inclinomètre m inclinometer, instrument used to measure magnetic inclination; tiltmeter, driftmeter, drift indicator.
- inclusion f enclave; enclosure; inclusion, the occurrence of one substance enclosed within another; a fragment of older rock within an igneous rock. inclusion endogène: endogenous inclusion, or autolith; an inclusion in an igneous rock to which it is genetically related. inclusion fluide: fluid inclusion. inclusion gazeuse: gaseous enclosure, gaseous inclusion in an igneous rock. inclusion liquide: liquid inclusion, liquid substance (water, carbonic acid, salt water) encompassed by a host crystal.
- incompatible incompatible, incapable of association or harmonious coexistence. élément incompatible: incompatible element, in a magma, an element that tends to remain in fusion when a magma crystallizes; incompatible elements are preferentially concentrated in the coexisting liquid phase, e.g. thorium, uranium, rare earths.
- incompétent(e) incompetent, refers to rocks that have been deformed in a ductile manner compared to more-brittle adjacent rocks.
- incomplet(ète) incomplete, partial, unfinished, fragmentary.
- **incompressibilité** f incompressibility, property of a substance that is not compressible.
- **inconformité** f unconformity, geologic surface separating two strata, representing the time interval of subaerial exposure, along which there is an evident hiatus of deposition and other erosional truncations and differences in composition and diagenesis. **inconformité angulare** : angular unconformity, angular discordance.
- **incorporation** f incorporation, mixture of a substance in another substance.
- incrément m increment, regular series of additions. incrément de déformation : strain increment, each small change in shape of a body within a more extensive deformation.
- incrémentiel(le) incremental, operating by successive additions.
- incrustant(e) encrusting, or incrusting; covering with a mineral crust.

**incrustation** f – encrustation; incrustation, the formation of a crust or hard coat on the surface of a rock, mineral or any object.

indéhiscent(e) – indehiscent, said of a fruit that does not open spontaneously upon maturity.

**indentation** *f* – indentation; reentrant, recess in a coastline.

indépendant(e) – independent, not connected to or influenced by something else.

**indérite** f – inderite, or lesserite; hydrated magnesium borate.

indétecté(e) – undetected, not having been discovered. couche indétectée : undetected layer.

**indialite** *f* – indialite, cyclosilicate that is dimorphous with cordierite at high temperature.

indianaïte f – indianaïte, porcelainlike clay mineral composed primarily of halloysite.

**indianite** f – indianite, variety of anorthite.

indicateur(trice) – indicator, indicating an origin, a direction, a property.

indicateur m – indicator, any element, animal or plant found in an environment with particular characteristics and that can be used to identify this environment; something that points out or displays; marker. indicateur coloré: acid-base indicator, any substance that changes color at a given pH. indicateur géobotanique: geobotanical indicator, see plante indicatrice: indicateur de marées: tide gage, an instrument for determining the variations of sealevel with time. indicateur de polarité sédimentaire: way-up indicator, see critères de polarité.

**indicatrice**  $\hat{f}$  – indicatrix, or index ellipsoid; a geometric figure representing the refractive indices of a crystal; time-distance curve, or T-X curve; in seismic surveying, the plot of the arrival time versus the source-point-to-geophone distance.

**indice** m – index, ratio or other number derived from a series of observations, used as an indicator or measurement of a condition, property or phenomenon (plur. indices). indice d'altération thermique (IAT) : thermal alteration index (TAI), a maturity scale based on kerogen color, usually on the change of color of spores and pollen from yellow to brown and to black, representing immature, mature and metamorphosed facies of organic matter. indice d'énergie : energy index, number indicating the degree of stability of a silicate or the degree of water agitation in a depositional environment. indice d'explosivité : explosive index, or explosivity index; percentage of pyroclastic ejecta in the material from a volcanic eruption. indice d'explosivité volcanique : volcanic explosivity index, a scale ranging from 0 to 8, designed to estimate the explosive magnitude of historical volcanism, based on various measurable parameters, e.g. volume of matter ejected, duration of eruption, height of eruption column. indice de gel: freezing index, product of freezing temperatures times their duration in hours. indice de liquidité : liquidity index, or relative water content, water-plasticity ratio; an expression of the consistency of a soil at its natural moisture content. indice de maturité : maturity index, measurement of how far a clastic sediment has progressed in the direction of chemical stability. indice portant californien: California bearing ratio (CBR), measure of the relative resistance of a given soil to penetration under controlled conditions of density and moisture content. indice portant du sol : soil-bearing value, pressure required for penetration into a soil as compared to the pressure required for the same penetration into a reference material. indice de rapidité : speed index, numerical expression for the sensitometric degree of the speed of a photographic emulsion whose value depends on the sensitometric scale adopted. indice de réfraction: index of refraction; refractive index (RI), the ratio of the velocity of electromagnetic radiation in a vacuum to that in a transparent medium. indice tempstempérature : time-temperature index, index calculated for the thermal evolution of organic matter, taking into consideration the reaction time and temperature variations. indice de végétation : vegetation index, a generic term for various techniques of image interpretation to show up variations in the amount of vegetation on the ground. indice des vides : void ratio, or voids ratio; the ratio of the volume of intergranular voids to the volume of solid material in a sediment, rock or soil. indice de viscosité (IV): viscosity index (VI), an arbitrary number, ranging from 0 to 100, indicating the effect of change of temperature on the kinematic viscosity of an oil.

indice m – indicator; show, the detectable presence of a mineral, oil or gas, usually determined from examining a core sample or cuttings. indices d'huile: oil shows, traces of oil seen on an outcrop. indice métallogénique: ore guide, any natural feature (organic or inorganic) indicating the presence of an orebody or mineral occurrence. indice de paléocourant: paleocurrent indicator, any deposit indicating the direction of the current that transported it in the past. indice de pièges: trap indicator, in petroleum exploration. indice de surface: seepage, or oil seep; emergence of oil at the surface as a result of an upward migration.

**indicolite** f – indicolite, indigo-blue variety of tourma-

**Indien** m – Indian, Pleistocene, see Diluvian (Greppin, 1867, obsolete).

indifférent(e) – indifferent, said of species without a pronounced affinity for any community.

**indigène** – indigenous, or endemic, autochthonous; said of the native population of a geographic area.

indigo – indigo, said of a dark blue color, obtained with pigments of vegetal origin.

**indinaïte** f – indinaite, variety of halloysite.

indistinct(e) – indistinct, confused; that cannot be distinguished.

**indite** f – indite, sulfide of indium and iron.

indium m – indium, malleable fusible metallic element, symbol In; atomic No. 49.

individu m – individual, distinct animal or plant organism.

indochinite f – indochinite, a variety of tektite found in Indochina.

inductance f – inductance, for a closed circuit, the quotient of the induction flux created by the current times the intensity of this current.

induction f – induction, process of reasoning from the particular (specific data) to the general, particularly when the conclusion does not follow directly from