

TECNOLOGIE CHIMICHE INDUSTRIALI

Indirizzo CHIMICA E MATERIALI

A cura del Prof.A.Tonini – www.andytonini.com

INDICE DEI DOCUMENTI DELLA SEZIONE TECNO-MATERIALI TUTTI I DOCUMENTI SONO **CONTENUTI NEI CD CHIMICA ITI INDICATI**

- TECNOLOGIA DEI MATERIALI – 3CHIMICA ITI
- PRINCIPI DI CORROSIONE E ELETTROCHIMICA – 3CHIMICA ITI
- MATERIALI COMPOSITI – 3CHIMICA ITI
- PLASTICA E ALIMENTI – 3CHIMICA ITI
- POLIMERI PARTE 1 – 4/5CHIMICA ITI
- POLIMERI PARTE 2- 4/5CHIMICA ITI
- PET TECNOLOGIE E RICICLO- 5CHIMICA
- PVC – 5CHIMICA
- POLIETILENE – 5CHIMICA
- NYLON – 5CHIMICA
- POLIPROPILENE – 5CHIMICA
- RICICLO POLIMERI – 5CHIMICA



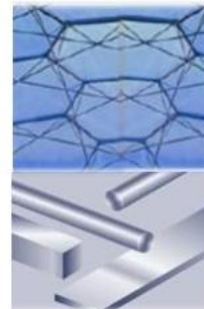
The Periodic Table of the Elements, in Pictures

Alkali Metals Group 1	Transition Metals																Boron Group 13	Carbon Group 14	Nitrogen Group 15	Oxygen Group 16	Halogens 17	Noble Gases 18
H Hydrogen 1 Sun and Stars	Li Lithium 3 Batteries	Be Beryllium 4 Emeralds	Na Sodium 11 Salt	Mg Magnesium 12 Chlorophyll	B Boron 5 Sports Equipment	C Carbon 6 Basis of Life's Molecules	N Nitrogen 7 Protein	O Oxygen 8 Air	F Fluorine 9 Toothpaste	Ne Neon 10 Advertising Signs	Al Aluminum 13 Airplanes	Si Silicon 14 Stone, Sand, and Soil	P Phosphorus 15 Bones	S Sulfur 16 Eggs	Cl Chlorine 17 Swimming Pools	Ar Argon 18 Light Bulbs	He Helium 2 Balloons					
K Potassium 19 Fruits and Vegetables	Ca Calcium 20 Shells and Bones	Sc Scandium 21 Bicycles	Ti Titanium 22 Aerospace	V Vanadium 23 Springs	Cr Chromium 24 Stainless Steel	Mn Manganese 25 Earthmovers	Fe Iron 26 Steel Structures	Co Cobalt 27 Magnets	Ni Nickel 28 Coins	Cu Copper 29 Electric Wires	Zn Zinc 30 Brass Instruments	Ga Gallium 31 Light-Emitting Diodes (LEDs)	Ge Germanium 32 Semiconductor Electronics	As Arsenic 33 Poison	Se Selenium 34 Copiers	Br Bromine 35 Photography Film	Kr Krypton 36 Flashlights					
Rb Rubidium 37 Global Navigation	Sr Strontium 38 Fireworks	Yttrium 39 Lasers	Zr Zirconium 40 Chemical Pipelines	Nb Niobium 41 Mag Lev Trains	Mo Molybdenum 42 Cutting Tools	Tc Technetium 43 Radioactive Diagnosis	Ru Ruthenium 44 Electric Switches	Rh Rhodium 45 Searchlight Reflectors	Pd Palladium 46 Pollution Control	Ag Silver 47 Jewelry	Cd Cadmium 48 Paint	In Indium 49 Liquid Crystal Displays (LCDs)	Sn Tin 50 Plated Food Cans	Sb Antimony 51 Car Batteries	Te Tellurium 52 Thermoelectric Coolers	I Iodine 53 Disinfectant	Xe Xenon 54 High-Intensity Lamps					
Cs Cesium 55 Atomic Clocks	Ba Barium 56 X-Ray Diagnosis	71 Rare Earth Metals	Hf Hafnium 72 Nuclear Submarines	Ta Tantalum 73 Mobile Phones	W Tungsten 74 Lamp Filaments	Re Rhenium 75 Rocket Engines	Os Osmium 76 Pen Points	Ir Iridium 77 Spark Plugs	Pt Platinum 78 Labware	Au Gold 79 Jewelry	Hg Mercury 80 Thermometers	Tl Thallium 81 Low-Temperature Thermometers	Pb Lead 82 Weights	Bi Bismuth 83 Fire Sprinklers	Po Polonium 84 Anti-Static Brushes	At Astatine 85 Radioactive Medicine	Rn Radon 86 Surgical Implants					
Fr Francium 87 Laser Atom Traps	Ra Radium 88 Luminous Watches	89 - 103 Actinide Metals	Rf Rutherfordium 104	Db Dubnium 105	Sg Seaborgium 106	Bh Bohrium 107	Hs Hassium 108	Mt Meitnerium 109	Ds Darmstadtium 110	Rg Roentgenium 111	Cn Copernicium 112	Nh Nihonium 113	Fl Flerovium 114	Mc Moscovium 115	Lv Livermorium 116	Ts Tennessine 117	Og Oganesson 118					
radioactive, never found in nature, no uses except atomic research																						
Rare Earth Metals	La Lanthanum 57 Telescope Lenses	Ce Cerium 58 Lighter Flints	Pr Praseodymium 59 Torchworks' Eyeglasses	Nd Neodymium 60 Electric Motor Magnets	Pm Promethium 61 Luminous Dials	Sm Samarium 62 Electric Motor Magnets	Eu Europium 63 Color Televisions	Gd Gadolinium 64 MRI Diagnosis	Tb Terbium 65 Fluorescent Lamps	Dy Dysprosium 66 Smart Material Actuators	Ho Holmium 67 Laser Surgery	Er Erbium 68 Optical Fiber Communications	Tm Thulium 69 Laser Surgery	Yb Ytterbium 70 Scientific Fiber Lasers	Lu Lutetium 71 Photodynamic Medicine							
Actinide Metals	Ac Actinium 89 Radioactive Medicine	Th Thorium 90 Gas Lamp Mantles	Pa Protactinium 91 Radioactive Waste	U Uranium 92 Nuclear Power	Np Neptunium 93 Radioactive Waste	Pu Plutonium 94 Nuclear Weapons	Am Americium 95 Smoke Detectors	Cm Curium 96 Mineral Analyzers	Bk Berkelium 97 Radioactive Waste	Cf Californium 98 Mineral Analyzers	Es Einsteinium 99	Fm Fermium 100	Md Mendelevium 101	No Nobelium 102	Lr Lawrencium 103	radioactive, never found in nature, no uses except atomic research						

TECNOLOGIA DEI MATERIALI – INDICE DEI MULTIMEDIA:

► **INDICE VIDEO SU CD 3CHIMICA:**

- 1 Corrosion and Its Types - Dragonfly Education
- 2 DIVX ALLUMINIO -



► **INDICE VIDEO SU CD 5CHIMICA:**

- 1 -CD POLIMERI
- 2 -CD REPLASTIC

► **INDICE VIDEO DISPONIBILI A RICHIESTA , SU DVD A PARTE:**

- CD SIDERURGIA –
- DVD ACCIAIO –
- DVD VIDEO DI TECNOLOGIE MECCANICHE –
- CD RAME -

► **INDICE DI VIDEO DIDATTICI [usati dal professore]:**

[=> si declina ogni responsabilità su reperimento e uso dei multimedia indicati]

<https://www.youtube.com/watch?v=PhCl75DQwso> - innovazioni dei materiali compositi avanzati per il design di strutture leggere

<https://www.youtube.com/watch?v=uE6FgkxUluA> - Processo di laminazione della fibra di carbonio Rius Composites

<https://www.youtube.com/watch?v=1vFyywOdvRE> - materiale composito

<https://www.youtube.com/watch?v=tKWlunKDWQE> - Tecnologia dei materiali: i metalli

<https://www.youtube.com/watch?v=CFujtN5fMoQ&list=PLnk6FHZckJRLD4QpmGCJxhJuNVCLnHk8a&index=3> - Proprietà chimico fisiche dei materiali

<https://www.youtube.com/watch?v=->

[CMJD8traEw&list=PLnk6FHZckJRLD4QpmGCJxhJuNVCLnHk8a&index=5](https://www.youtube.com/watch?v=CMJD8traEw&list=PLnk6FHZckJRLD4QpmGCJxhJuNVCLnHk8a&index=5) - Proprietà dei materiali

<https://www.youtube.com/watch?v=r5sBO96k5es> - I Materiali –

<https://www.youtube.com/watch?v=bYvPHn95n9A> - I metalli parte I –

<https://www.youtube.com/watch?v=3GXSoq3oDoY> - I metalli (parte II)

<https://www.youtube.com/watch?v=zYeboM43I1Y> - Dal modello alla fusione

<https://www.youtube.com/watch?v=2lddd5hg1RQ> - Lavorazione dei materiali


<https://www.youtube.com/watch?v=dnPPWbwckAk> - COREPLA - La seconda vita degli imballaggi in plastica. Dalla raccolta al riciclo.


<https://www.youtube.com/watch?v=ETTIGiZzuQI> - Tecnologia dei materiali: il legno


<https://www.youtube.com/watch?v=IVKm5YZS6SU> - R. Frassine (Materiali compositi polimerici)-POLIMI


<https://www.youtube.com/watch?v=IK9KTIvKu6s> - Il mondo del carbonio


► **VIDEO VARI SU CORROSIONE [da youtube] =>**


 0 Cathodic Protection - Galvanic - Sacrificial


 0 Propr_chimfis corros_11_10


 1 Corrosion and Its Types - Dragonfly Education


 1 Different Types of Surface Films - Dragonfly Education


 2 Corrosion of Metals - The Chemistry Journey -

 2 Materials & Processes - 5 Corrosion Prevention

 Corrosion 1 Part 1

 Corrosion 1 Part 2

 Corrosion 1 Part 3

 CORROSION Y OXIDACION