



**ACCESS**  **Engineering**<sup>®</sup>  
Authoritative content. Immediate solutions.

## Access Engineering

to multimedialna  
baza/platforma wiedzy dla :

- naukowców
- inżynierów
- kadry dydaktycznej
- studentów

## Oferuje:

- regularnie aktualizowane informacje
- interaktywne funkcje online
- narzędzia personalizacji
- rozwiązywanie rzeczywistych problemów inżynierskich
- najnowsze dane ze świata inżynierii
- codzienna aktualizacja danych

**ACCESS** Engineering

Authoritative content. Immediate solutions.

[ABOUT](#) | [HELP](#) | [ADMINISTRATION](#) | [CONTACT US](#) | [ROAMING PASSPORT](#)

Search Access Engineering

GO

Advanced Search

[HOME](#)

[SUBJECTS](#) ▼

[INDUSTRIES](#) ▼

[TITLES \(A-Z\)](#)

[CURRICULUM MAPS](#) ▼

[SIGN IN](#)



[WELCOME TO  
AccessEngineering](#)

[FOR INSTRUCTORS](#)

[FOR  
PROFESSIONALS](#)

[FOR LIBRARIANS](#)

### AccessEngineering offers:

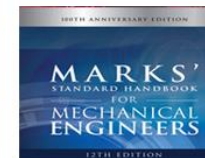
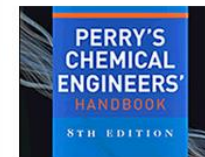
- Renowned engineering handbooks
- Faculty-created instructional videos
- Downloadable Excel calculators
- Time-saving curriculum maps
- Powerful search tools
- Interactive tables and graphs
- Global engineering news
- [DataVis](#) - the interactive data visualization tool for teaching material properties



### Featured Content

**DataVis**  
Material Properties

Interactive Teaching Tool



[Tweets by @MHEngineering](#)

### Browse Subjects



- ▶ [Bio](#)
- ▶ [Business Skills](#)
- ▶ [Chemical](#)
- ▶ [Civil](#)
- ▶ [Communications](#)
- ▶ [Electrical/Electronics](#)
- ▶ [Energy/Petroleum](#)

- ▶ [Environmental/Sustainable](#)
- ▶ [Industrial](#)
- ▶ [Makerspace](#)
- ▶ [Materials](#)
- ▶ [Mechanical](#)
- ▶ [Operations Management](#)
- ▶ [Schaum's Outlines](#)
- ▶ [Software](#)

### Tools & Media

- ▶ [Calculators](#)
- ▶ [Curriculum Maps](#)
- ▶ [DataVis - Material Properties](#)
- ▶ [DataVis Projects](#)
- ▶ [Engineering News](#)
- ▶ [Graphs](#)
- ▶ [Tables](#)
- ▶ [Tutorials](#)
- ▶ [Videos](#)

### Today's Global Engineering news

[How Cummins Became an Engine of Energy Efficiency](#)

[Smoked out: Researchers develop a new wildfire smoke](#)

[Genetically engineered virus spins gold into beads](#)

## 15 głównych specjalizacji inżynierskich:

- Bioinżynieria
- Umiejętności biznesowe
- Inżynieria chemiczna
- Inżynieria lądowa i wodna
- Inżynieria łączności
- Inżynieria elektryczna i elektroniczna
- Energetyka i inżynieria naftowa
- Ekologiczna i zrównoważona inżynieria
- Inżynieria przemysłowa
- Pracownie/Wytwórnie IT/Elektronika
- Nauka o materiałach i inżynieria materiałowa
- Inżynieria mechaniczna
- Zarządzanie operacyjne
- Seria wydawnicza: Zarysy Schaum'a
- Inżynieria oprogramowania

The screenshot displays the ACCESS Engineering website interface. At the top, there is a navigation bar with links for ABOUT, HELP, ADMINISTRATION, CONTACT US, and ROAMING PASSPORT. The main header features the ACCESS Engineering logo and the tagline "Authoritative content. Immediate solutions." A search bar is located on the right side of the header. Below the header, a navigation menu includes HOME, SUBJECTS (highlighted with a red circle), INDUSTRIES, TITLES (A-Z), and CURRICULUM MAPS. The SUBJECTS dropdown menu is open, listing various engineering disciplines: BIO, BUSINESS SKILLS, CHEMICAL, CIVIL, COMMUNICATIONS, ELECTRICAL / ELECTRONICS, ENERGY / PETROLEUM, ENVIRONMENTAL / SUSTAINABLE, INDUSTRIAL, MAKERSPACE, MATERIALS, MECHANICAL, OPERATIONS MANAGEMENT, SCHAUM'S OUTLINES, and SOFTWARE. Below the menu, there are sections for Tools & Videos, Books, and Featured Content. The Featured Content section includes a book cover for "Applied Biofluid Mechanics" and a book cover for "APPLIED BIOFLUID MECHANICS 2ND EDITION".



Przeglądanie bazy w/g  
gałęzi przemysłu - branż

**ACCESS** Engineering  
Authoritative content. Immediate solutions.

Search Access Engineering  GO  
[Advanced Search](#)

HOME SUBJECTS ▾ INDUSTRIES ▾ TITLES (A-Z) CURRICULUM MAPS ▾ SIGN IN

WELCOME TO [AccessEngineering](#)

FOR INSTRUCTORS

FOR PROFESSIONALS

FOR LIBRARIANS

AEROSPACE AND DEFENSE

AUTOMOTIVE

BUILDING AND CONSTRUCTION

CHEMICAL

ELECTRONICS

MANUFACTURING

OIL AND GAS

- [DataVis](#) - the interactive data visualization tool for teaching material properties

**Featured Content**

[DataVis Material Properties](#)  
Interactive Teaching Tool

[PERRY'S CHEMICAL ENGINEERS' HANDBOOK](#)  
8TH EDITION

[MARKS' STANDARD HANDBOOK FOR MECHANICAL ENGINEERS](#)  
12TH EDITION





[Spreadsheet Calculators](#)

**Browse Subjects**

- ▶ [Bio](#)
- ▶ [Business Skills](#)
- ▶ [Chemical](#)
- ▶ [Civil](#)
- ▶ [Communications](#)
- ▶ [Electrical/Electronics](#)
- ▶ [Energy/Petroleum](#)
- ▶ [Environmental/Sustainable](#)
- ▶ [Industrial](#)
- ▶ [Makerspace](#)
- ▶ [Materials](#)
- ▶ [Mechanical](#)
- ▶ [Operations Management](#)
- ▶ [Schaum's Outlines](#)
- ▶ [Software](#)

**Tools & Media**

- ▶ [Calculators](#)
- ▶ [Curriculum Maps](#)
- ▶ [DataVis - Material Properties](#)
- ▶ [DataVis Projects](#)
- ▶ [Engineering News](#)
- ▶ [Graphs](#)
- ▶ [Tables](#)
- ▶ [Tutorials](#)





Przeglądanie bazy w/g  
tytułów zgromadzonych  
pozycji

The screenshot shows the ACCESS Engineering website interface. At the top left is the logo "ACCESS Engineering" with the tagline "Authoritative content. Immediate solutions." To the right is a search bar with the text "Search Access Engineering" and a "GO" button, with a link to "Advanced Search" below it. Below the logo is a navigation menu with buttons for "HOME", "SUBJECTS", "INDUSTRIES", "TITLES (A-Z)" (highlighted with a red box), and "CURRICULUM MAPS". To the right of the navigation is a "SIGN IN" button with a lock icon. Below the navigation, the page shows "Home" and "Browse (All)". A list of filters is provided: "A-E", "F-J", "K-O", "P-T", "U-Z", "Other", and "All". The main content area displays three search results, each with a book cover, a title, and an author name:

- 15 Dangerously Mad Projects for the Evil Genius**  
Author(s): Dr. Simon Monk
- 20 Makey Makey Projects for the Evil Genius**  
Author(s): Colleen Graves, Aaron Graves
- 2012 International Building Code® Handbook**  
Author(s): Douglas W. Thornburg, AIA, John R. Henry, P.E.

On the right side of the page, there is a "Featured Content" section with three items:

- DataVis Material Properties**  
Interactive Teaching Tool
- PERRY'S CHEMICAL ENGINEERS' HANDBOOK**  
8TH EDITION
- MARKS' STANDARD HANDBOOK FOR MECHANICAL ENGINEERS**  
12TH EDITION

At the bottom of the featured content is a link for "Spreadsheet Calculators" with an "XLSX" icon.

Przeglądanie bazy w/g  
gotowych materiałów  
dydaktycznych  
- programy nauczania do  
użycia w prowadzeniu  
wykładów / kursów

Curriculum Maps – zebrany i  
uszeregowany tematycznie  
materiał szkoleniowy  
(programy nauczania)  
z **17 dziedzin**

The screenshot shows the ACCESS Engineering website interface. At the top, there is a search bar with the text "Search Access Engineering" and a "GO" button. Below the search bar is a navigation menu with options: HOME, SUBJECTS, INDUSTRIES, TITLES (A-Z), CURRICULUM MAPS, and SIGN IN. The CURRICULUM MAPS dropdown menu is open, listing various engineering topics: CIRCUIT ANALYSIS (DC AND AC), CONTROL SYSTEMS, ELECTRONICS, ENGINEERING ECONOMICS, FLUID FLOW / MOMENTUM TRANSFER, HEAT TRANSFER, MACHINE DESIGN, MASS TRANSFER, MATERIALS SCIENCE AND ENGINEERING (MSE), QUALITY CONTROL, REACTION KINETICS, SEPARATIONS, STRENGTH OF MATERIALS, THERMODYNAMICS, VIBRATION AND CONTROL, WASTEWATER TREATMENT / PLANT DESIGN, and WATER TREATMENT / PLANT DESIGN. Below the navigation menu, there is a "WELCOME TO /AccessEngineering" section with links for "FOR INSTRUCTORS", "FOR PROFESSIONALS", and "FOR LIBRARIANS". To the right, there is a section titled "AccessEngineering offers" with a list of features: "Renowned engineering handbook", "Faculty-created instructional video", "Downloadable Excel calculators", "Time-saving curriculum maps", "Powerful search tools", "Interactive tables and graphs", "Global engineering news", and "DataVis - the interactive data visualization tool". Below this, there is a "Browse Subjects" section with three image thumbnails and a list of subject categories: Bio, Business Skills, Chemical, Civil, Communications, Electrical/Electronics, Energy/Petroleum, Environmental/Sustainable, Industrial, Makerspace, Materials, Mechanical, Operations Management, Schaum's Outlines, and Software. At the bottom right, there is a "Spreadsheet Calculators" section with an "XLSX" icon and a list of resources: Properties, DataVis Projects, Engineering News, Graphs, Tables, and Tutorials.



**Narrow your search** ?

Filter by Subject

- Electrical & electronics engineering (140)
- Civil engineering (113)
- Mechanical engineering (107)
- Environmental & sustainable engineering (73)
- Chemical engineering (65)
- [Show more...](#)

Filter by Type

- < All Types**
- book (750)**

Filter by Process

- ▶ Design (73)
- ▶ Operations (42)
- ▶ Calculations (33)
- ▶ Modeling & Simulation (33)
- ▶ Sustainability (18)
- [Show more...](#)

Home

Search Results

Your search for **Type: book** returned **750** results.

**[Dean's Analytical Chemistry Handbook, Second Edition](#)**

Dean's Analytical Chemistry Handbook, Second Edition Chemical 9780071410601 2012-01-01 Pradyot Patnaik Ph.D., is the Director of the Environmental Chemistry Laboratory of the Interstate Sanitation Commission, Staten Island, New York, and a Research Investigator for the Center for Environmen ...

Type: Book

**[Digital Analysis of Remotely Sensed Imagery](#)**

Digital Analysis of Remotely Sensed Imagery Electrical 9780071604659 2012-01-01 Jay Gao is the author of this McGraw-Hill Professional publication. Identifies and introduces new trends in image analysis. Digital Analysis of Remotely Sensed Imagery provides exhaustive coverage of the entire ...

Type: Book

**[Construction Administration for Architects](#)**

Construction Administration for Architects Civil 9780071622318 2012-01-01 Greg Winkler is the author of this McGraw-Hill Professional publication. The ideal desktop architectural guide to navigating the construction process and anticipating, avoiding, and managing liability risks. This inva ...

Type: Book

Ponad **750** tytułów książek  
oraz:

- **170 943** artykułów
- **5 813** grafik
- **930** filmów

## Access Engineering

to znane znakomite publikacje z dziedziny inżynierii



w tym tak znane:

- **Perry's Chemicals Engineering Handbook**
- **Mark'Standard Handbook for Mechanical Engineer's**
- **Roark's Formulas for Stress and Strain**
- **Building Design and Construction Handbook**
- **Seria wydawnicza „Schaum's Outlines”**



# Wyszukiwanie podstawowe

The screenshot shows the ACCESS Engineering website interface. At the top right, there is a search bar with the text 'wireless phone' and a 'GO' button. Below the search bar is a blue button labeled 'Advanced Search'. A red circle highlights this button, with a red arrow pointing to it from a text box on the left. The main navigation bar includes links for HOME, SUBJECTS, INDUSTRIES, TITLES (A-Z), and CURRICULUM MAPS. A 'SIGN IN' button is also visible. The search results section shows 'Your search for wireless phone | Type: book returned 23 results.' Three result snippets are visible, each with a title and a brief description. A red box highlights the 'Filter by Subject' section on the left, which lists various engineering categories with their respective counts. A red arrow points from a text box on the left to this filter section. The 'Filter by Type' section shows 'book (23)' as the selected filter. The 'Filter by Process' section lists 'Project Management (1)', 'Calculations (1)', and 'Design (1)'. The result snippets include titles like '3G Wireless Networks', 'Wireless Security: Models, Threats, and Solutions', and 'Wireless and Cellular Communications, Third Edition'.

Szukanie wg słów  
kluczowych we  
wszystkich książkach  
oraz w słowniku

Zawężanie wyników  
wyszukiwania/  
Wybór jednej ze  
specjalizacji

# Przykładowe wyniki wyszukiwania

Szukane słowa  
kluczowe są  
zaznaczone  
wytluszczeniem

The screenshot shows the ACCESS Engineering website interface. At the top, there is a navigation menu with links for ABOUT, HELP, ADMINISTRATION, CONTACT US, and ROAMING PASSPORT. The main header features the ACCESS Engineering logo and the tagline "Authoritative content. Immediate solutions." A search bar on the right contains the query "wi-fi technology" and a GO button. Below the search bar is an "Advanced Search" link. A secondary navigation bar includes HOME, SUBJECTS, INDUSTRIES, TITLES (A-Z), and CURRICULUM MAPS. A SIGN IN button with a lock icon is also present.

The search results page displays "Search Results" for the query "wi-fi technology", which returned 7 results. The first result is titled "Grid Home Network (G.hn) Communication Standard". The text of this result includes the phrase "Wi-Fi technology" circled in red. The second result is titled "Summary and Open Issues" and also contains the phrase "Wi-Fi technology" circled in red. The third result is titled "Introduction to Wi-Fi" and contains the phrase "Wi-Fi technology" circled in red. On the left side of the page, there is a "Narrow your search" section with filters for Subject, Title, Type, and Process. The Subject filter is expanded, showing categories like "Energy & petroleum engineering (5)", "Communications engineering (5)", and "Electrical & electronics engineering (2)".



# Przykładowe wyniki wyszukiwania

Możliwość zawężenia wyników wyszukiwania po kategoriach:

- dziedzina
- rodzaj multimediiów
- tytuł publikacji
- rodzaj procesu

The screenshot shows the ACCESS Engineering website interface. At the top, there is a navigation menu with links for ABOUT, HELP, ADMINISTRATION, CONTACT US, and ROAMING PASSPORT. The ACCESS Engineering logo is prominently displayed, along with the tagline "Authoritative content. Immediate solutions." A search bar on the right contains the query "wireless phone" and a "GO" button. Below the search bar, there are navigation tabs for HOME, SUBJECTS, INDUSTRIES, TITLES (A-Z), and CURRICULUM MAPS, along with a "SIGN IN" button.

The search results page shows "Search Results" for the query "wireless phone", indicating 50 results. The first result is "12-3 LPE RTP vocoding in a GSM wireless phone," which is a figure from the source "Wireless Security: Models, Threats, and Solutions." The second result is "FOREWORD" from the source "Wireless Telecommunications Networking with ANSI-41, Second Edition." The third result is "Over-the-Air Service Provisioning (OTASP)" from the source "CDMA Capacity and Quality Optimization." The fourth result is "Calling Party Pays (CPP)" with a partial description: "The cost of owning a wireless phone would be considerably lower, since subscribers would not".

On the left side of the search results, there is a "Narrow your search" section with a red border. It contains two filter sections: "Filter by Subject" and "Filter by Title". The "Filter by Subject" section lists categories such as "Communications engineering (39)", "Software engineering (12)", "Operations management (6)", "Electrical & electronics engineering (2)", "Business Skills (2)", and "Civil engineering (2)". The "Filter by Title" section lists titles such as "Wireless Security: Models, Threats, and Solutions (12)", "Signaling System #7, Sixth Edition (9)", "Signaling System #7, Fifth Edition (9)", "Wireless Telecommunications Networking with ANSI-41, Second Edition (4)", and "Lean Six Sigma Demystified, Second Edition (4)".

# Wyszukiwanie zaawansowane

Możliwość zawężenia wyników wyszukiwania o

- słowa kluczowe
- frazy z użyciem operatorów Boolean'a (AND, OR, NOT)

Możemy doprecyzować i zawęzić szukanie do określonych tematów

ABOUT | HELP | ADMINISTRATION | CONTACT US | ROAMING PASSPORT

**ACCESS** Engineering  
Authoritative content. Immediate solutions.

Search Access Engineering    
[Advanced Search](#)

HOME | SUBJECTS ▼ | INDUSTRIES ▼ | TITLES (A-Z) | CURRICULUM MAPS ▼ | SIGN IN

Home > Advanced Search

### Advanced Search

Enter one or more search criteria below. Boolean AND, OR and NOT are supported (e.g. mechanical AND engineering). Use quotation marks (" ") to find an exact phrase (e.g. "mechanical engineering"). Use asterisks to match partial words in fields (e.g. circuit\*).

Search for:   ▼

With this author:

But do not search for:

---

Within:

This content type:  ▼

This subject:  ▼

This title:  ▼

#### Featured Content

**DataVis**  
Material Properties

Interactive Teaching Tool

**PERRY'S  
CHEMICAL  
ENGINEERS'  
HANDBOOK**

8TH EDITION

100TH ANNIVERSARY EDITION

**MARKS'  
STANDARD HANDBOOK  
FOR  
MECHANICAL  
ENGINEERS**

12TH EDITION

**XLSX**

Spreadsheet Calculators



# Przykładowe wyniki wyszukiwania



Authoritative content. Immediate solutions.

[Advanced Search](#)  Search within this title

[HOME](#) [SUBJECTS ▼](#) [INDUSTRIES ▼](#) [TITLES \(A-Z\)](#) [CURRICULUM MAPS ▼](#) [SIGN IN](#) 

Home > Wireless Telecommunications Networking with ANSI-41, Second Edition

## Wireless Telecommunications Networking with ANSI-41, Second Edition



by: Randall A. Snyder, Michael D. Gallagher

**Abstract:** ALL-IN-ONE GUIDE TO ANSI-41 Revision E is the North American standard for wireless telecommunications network signaling. Written by Randall Snyder and Michael Gallagher, two of the new standard's developers, Wireless Tel Network with ANSI-41, Second Edition provides you with the latest need-to-know revisions, operational details, and protocol usage of the standard. This edition packs a new chapter on WIN (Wireless Intelligent Network) and a complete listing of federally mandated features and functions. You'll explore wireless telecommunications standards, signaling, and network reference models... wireless functionality... structure of the ANSI-41 standard and protocol architecture... basic intersystem handoff functions, automatic roaming functions, authentication functions, call processing functions, short-message service functions, and operations, administration, and maintenance functions.

[Full details](#)

### Table of Contents

- A. [FOREWORD](#)
- B. [PREFACE](#)
- C. [ACKNOWLEDGMENTS](#)
- 1. [Basics of Wireless Telecommunications](#)
- 2. [Wireless Telecommunications Standards](#)
- 3. [Wireless Telecommunications Network Signaling](#)


### Featured Content



Interactive Teaching Tool



8TH EDITION



12TH EDITION



Spreadsheet Calculators

# Przykładowe wyniki wyszukiwania

W bazę wbudowany jest  
słownik  
**McGraw-Hill Dictionary of  
Engineering**  
który zawiera  
ok. 18.000  
haseł, synonimów  
akronimów, skrótów  
oraz sposobów wymowy.

The screenshot shows the ACCESS Engineering website interface. At the top right, there are navigation links: ABOUT, HELP, ADMINISTRATION, CONTACT US, and ROAMING PASSPORT. The main header features the ACCESS Engineering logo with the tagline 'Authoritative content. Immediate solutions.' Below the logo is a search bar containing the word 'refraction' and a 'GO' button. A link for 'Advanced Search' is also visible. A horizontal menu contains links for HOME, SUBJECTS, INDUSTRIES, TITLES (A-Z), and CURRICULUM MAPS. A 'SIGN IN' button with a lock icon is on the right. On the left side, there is a 'Narrow your search' section with a filter by subject. The search results section shows 'Search Results' for 'refraction' with 2,023 results. A 'Close' button is present next to the search term. The definition of 'refraction' is provided, including its etymology and a source reference. A detailed definition of 'Refraction' is also shown at the bottom.

ABOUT | HELP | ADMINISTRATION | CONTACT US | ROAMING PASSPORT

**ACCESS** Engineering  
Authoritative content. Immediate solutions.

refraction GO  
Advanced Search

HOME | SUBJECTS ▼ | INDUSTRIES ▼ | TITLES (A-Z) | CURRICULUM MAPS ▼ | SIGN IN 🔒

Home  
Search Results

Your search for **refraction** returned **2 023** results.  
[Hide dictionary definition for refraction](#)

**refraction** [Close](#)

*electromagnetism*  
The change in direction of lines of force of an electric or magnetic field at a boundary between media with different permittivities or permeabilities.

*physics*  
The change of direction of propagation of any wave, such as an electromagnetic or sound wave, when it passes from one medium to another in which the wave velocity is different, or when there is a spatial variation in a medium's wave velocity.

*nī'frak-shan*

Source: McGraw-Hill Dictionary of Scientific and Technical Terms, 6th ed., McGraw-Hill, New York, 2003.

**Refraction**  
**Refraction** Investigation of Eqs. (10.3), (10.4), and (10.8) will show that as waves enter shallow water ( $d/L < 0.5$ ), the wavelength and the wave celerity decrease. When the waves approach the shore in such a manner that the angle  $\alpha$  between the wave crests and the bottom contours is greater than zero, the depth will vary from point to point along each wave crest ...  
Type: Text

# Dodatkowe funkcjonalności

**Nowo dodane książki**  
**oraz**  
**polecane pozycje**  
**z danej dziedziny inżynierii**

The screenshot displays the ACCESS Engineering website interface. At the top, there are navigation links: ABOUT, HELP, ADMINISTRATION, CONTACT US, and ROAMING PASSPORT. The main header features the ACCESS Engineering logo with the tagline "Authoritative content. Immediate solutions." and a search bar with a "GO" button and a link to "Advanced Search". Below the header is a navigation menu with buttons for HOME, SUBJECTS, INDUSTRIES, TITLES (A-Z), and CURRICULUM MAPS, along with a "SIGN IN" button. The main content area is titled "BioEngineering" and is circled in red. It features a "Featured Content" section with three book covers: "Biomedical Engineering & Design Handbook Vol 1, 2nd Ed.", "Biomedical Engineering & Design Handbook Vol 2, 2nd Ed.", and "Applied Biofluid Mechanics". Each book cover includes a "Contents" link. Below this, there is a "Tools & Media" section with links for "Graphs" and "Videos", and a "Books" section listing various titles such as "Applied Biofluid Mechanics (archived edition)", "Applied Biofluid Mechanics, Second Edition", "Applied Cell and Molecular Biology for Engineers", "Artificial Tactile Sensing in Biomedical Engineering", "Bioinformatics: Principles and Applications", "Bioinformatics: Sequence Alignment and Markov Models", "Biofuels Refining and Performance", "Biomedical Applications of Light Scattering", "Biomedical Engineering and Design Handbook - Volume 1: Fundamentals, Second Edition", "Biomedical Engineering and Design Handbook - Volume 2: Applications, Second Edition", "Bioreactors: Analysis and Design", "Biosystems Engineering", and "Computer-Aided Drug Design and Delivery Systems". On the right side of the page, there is a "Featured Content" section with a "Biofuels Refining and Performance" book cover, an "APPLIED BIOFLUID MECHANICS 2ND EDITION" book cover, an "Instructive Videos" section with a diagram, and an "Interactive Graphs" section with a graph.

# Dodatkowe funkcjonalności

## Tools & Media:

Baza zawiera również:

- kalkulatory
- programy nauczania
- dodatki do DataVis
- projekty DataVis
- nowości ze świata inżynierii
- grafiki(obrazy)
- interaktywne wykresy
- interaktywne tabele
- kursy
- materiały video

The screenshot displays the ACCESS Engineering website. At the top left is the logo "ACCESS Engineering" with the tagline "Authoritative content. Immediate solutions." To the right is a search bar with the text "Search Access Engineering" and a "GO" button, with a link for "Advanced Search" below it. A navigation bar contains links for "HOME", "SUBJECTS", "INDUSTRIES", "TITLES (A-Z)", and "CURRICULUM MAPS", along with a "SIGN IN" button. The main content area is divided into several sections: "WELCOME TO AccessEngineering" with sub-links for "FOR INSTRUCTORS", "FOR PROFESSIONALS", and "FOR LIBRARIANS"; "AccessEngineering offers:" listing features like engineering handbooks, instructional videos, Excel calculators, curriculum maps, search tools, interactive tables, global news, and DataVis; "Browse Subjects" with a grid of subject images and a list of categories including Bio, Business Skills, Chemical, Civil, Communications, Electrical/Electronics, Energy/Petroleum, Environmental/Sustainable, Industrial, Makerspace, Materials, Mechanical, Operations Management, Schaum's Outlines, and Software; "Tools & Media" (highlighted with a red box) listing "Calculators", "Curriculum Maps", "DataVis - Material Properties", "DataVis Projects", "Engineering News", "Graphs", "Tables", "Tutorials", and "Videos"; and "Featured Content" featuring "DataVis Material Properties" (Interactive Teaching Tool), "PERRY'S CHEMICAL ENGINEERS' HANDBOOK 8TH EDITION", and "MARKS' STANDARD HANDBOOK FOR MECHANICAL ENGINEERS 12TH EDITION" (100th Anniversary Edition), with a "Spreadsheet Calculators" icon at the bottom.





# Interaktywne wykresy i tabele

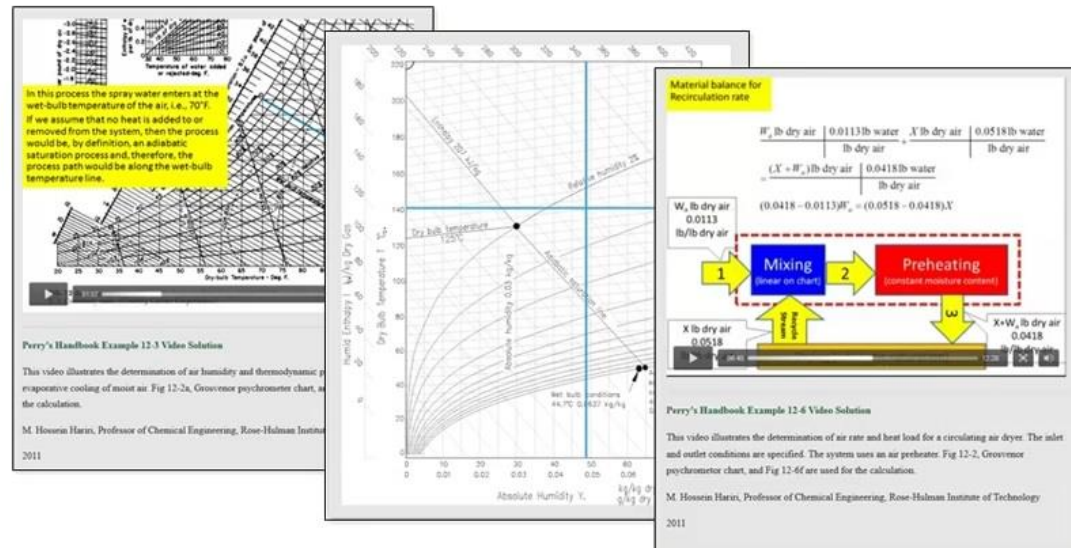
Analiza danych w pracach badawczych i projektach

Interaktywne wykresy  
I wizualizacje zmieniające w trakcie wpisywania różnych danych.

Mc  
Graw  
Hill  
Education

ACCESS Engineering®

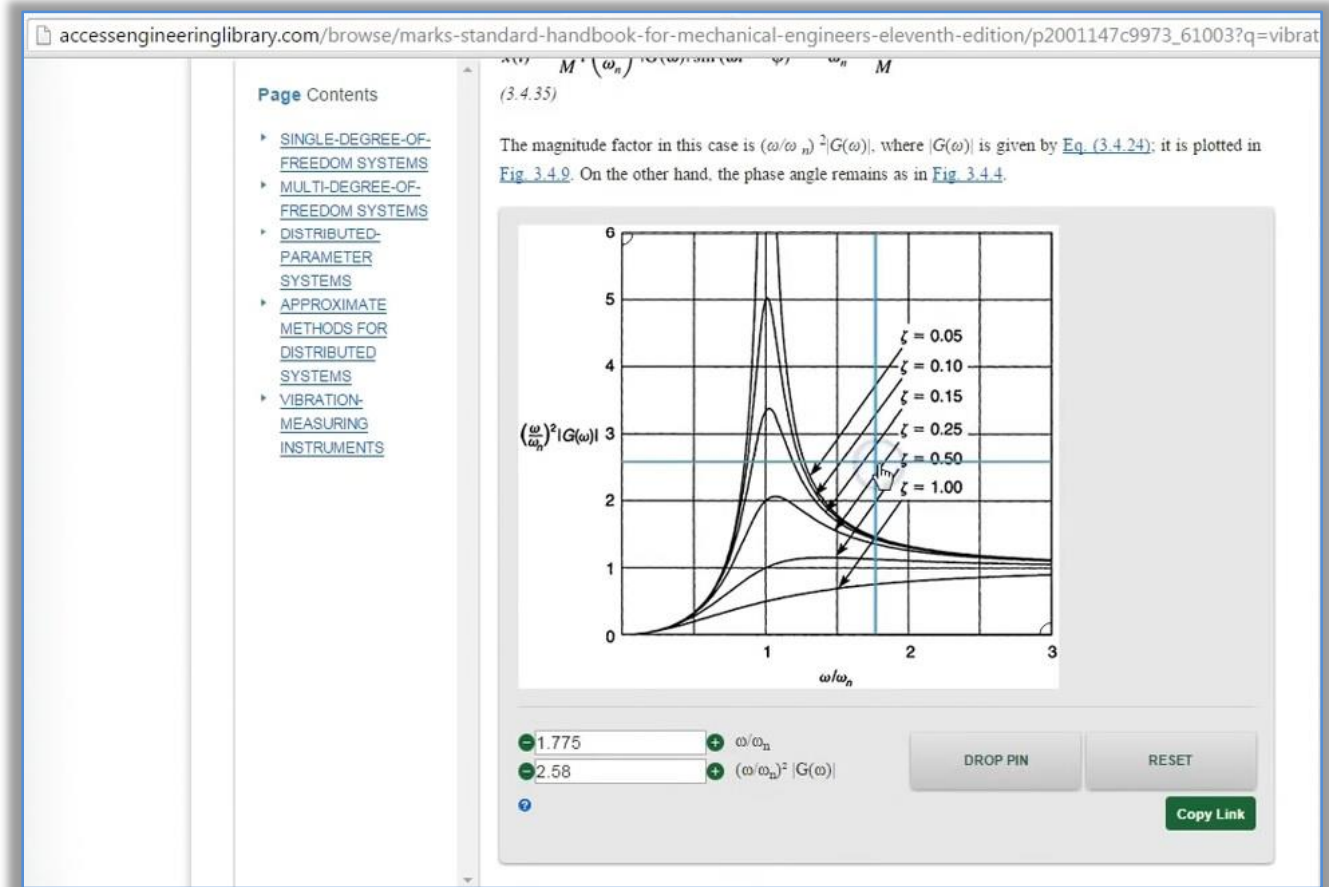
Authoritative content. Immediate solutions.



# Interaktywne wykresy i tabele

Analiza danych w pracach badawczych i projektach

Interaktywne wykresy i wizualizacje zmieniane w trakcie wpisywania różnych danych.



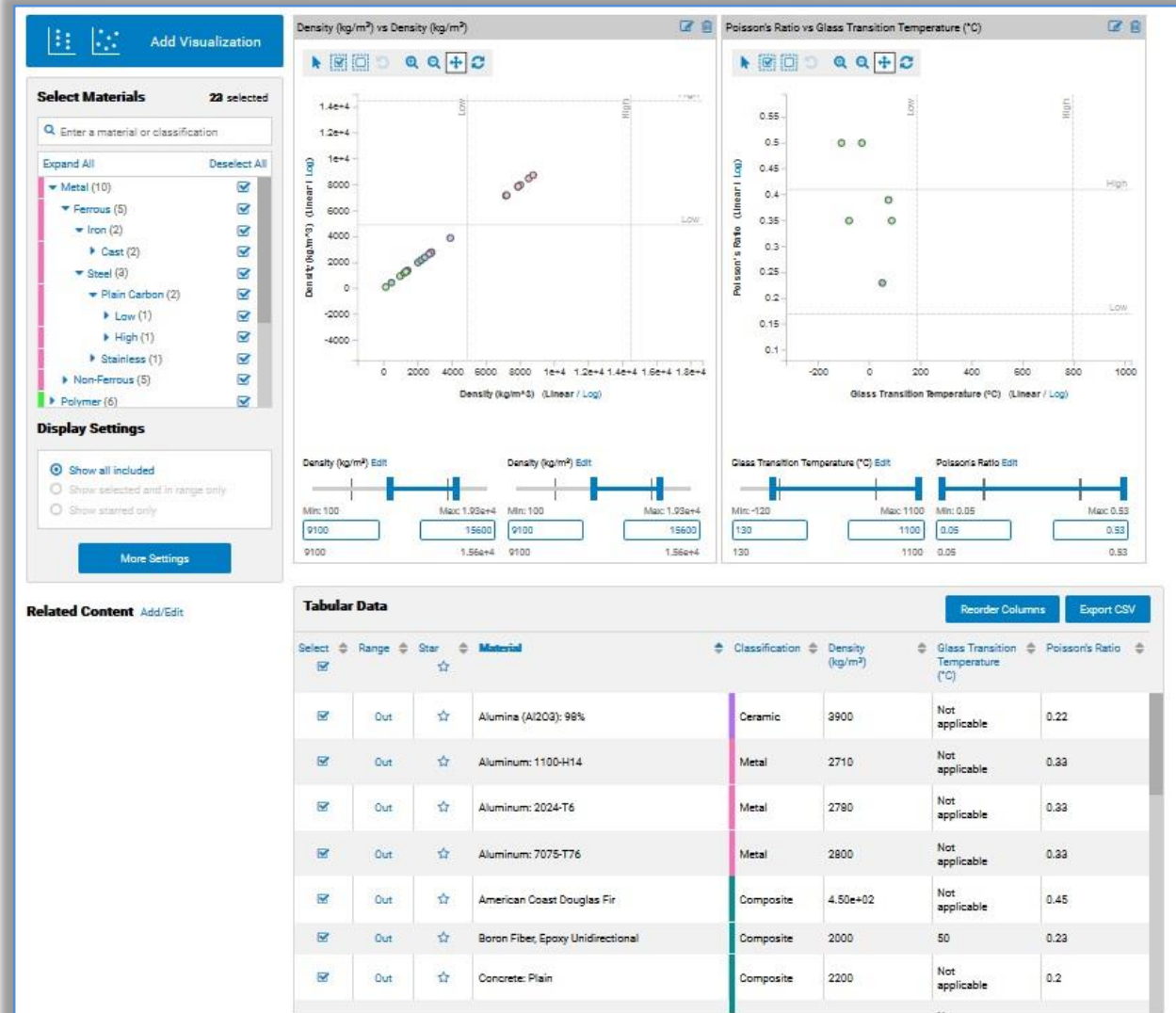
# DataVIS

## Nowo dodana funkcja !

Interaktywne narzędzie do wizualizacji danych i właściwości różnych materiałów

## Możliwości funkcji DataVIS:

- zapisywanie ulubionych materiałów
- wizualizacje z wynikami można współdzielić z innymi wyexportować wyniki na stronie dla innych



## Kalkulatory Excell

pozwalające na sprawne obliczenia i symulacje wyników przy badaniach naukowych i rozwiązywaniach zagadnień

The screenshot displays an Excel spreadsheet with a calculator interface for liquid density. The interface is organized into several sections:

- Flow thru Annulus:** A section with a dropdown menu for configuration. A note states: "The temperature information you enter on the worksheet selected here will be used to determine fluid properties in this worksheet."
- Select a Liquid:** A dropdown menu currently showing "Tetrahydrofuran". A note says: "(Enter Values in yellow cells only)".
- Temperature Range:** Fields for "Temperature Range (°F): -162 to 513" and "Liquid Temp. for Prop. Estimation (°F): 125.03".
- Density from above menu selection:** A field showing "53.12 lbm/ft<sup>3</sup>". A note states: "NOTE: The temperature above is the bulk mean liquid temp. or the film temp. from the selected config. worksheet."
- OR**
- Enter a Liquid Density Obtained Elsewhere:** A field for "Liquid Density (lbm/ft<sup>3</sup>):".
- Liquid Density Result:** A field showing "53.12 lbm/ft<sup>3</sup> (from menu selection)".
- Unit Conversion:** A field showing "1.651 slugs/ft<sup>3</sup>".
- Table of Liquid Properties:** A table with columns for liquid name, temperature range, and density values. A note states: "If the working liquid temperature is above the atmospheric boiling".

	-162 to 513	1.2543	0.28084	540.15
<b>Calculations:</b>	53.1184			Excel Vlc
<b>Range, °F</b>		c1	c2	Variables for Density
			c3	
1,1,2-Trichloroethane	-33 to 624	0.9062	0.25475	602
1,2-Butadiene	-215 to 354	1.187	0.26114	452
1,2-Propylene glycol	-76 to 666	1.0923	0.26106	626
1,3-Butadiene	-164 to 306	1.2346	0.27216	425
1-Butanol	-128 to 554	0.98279	0.2683	563.1
1-Octanol	5 to 714	0.48979	0.24931	652.3
1-Propanol	-195 to 507	1.2457	0.27281	536.8
2-Butanol	-175 to 504	0.9682	0.26244	535.9
2-Octanol	-23 to 675	0.50726	0.25972	629.8
2-Propanol	-126 to 455	1.1799	0.2644	508.3
Acetic acid	63 to 604	1.4486	0.25892	591.95
Acetic anhydride	-99 to 631	0.86852	0.25187	606
Acetone	-139 to 455	1.2332	0.25886	508.2
Acetonitrile	-47 to 523	1.3064	0.22597	545.5
Acrylic acid	55 to 648	1.2414	0.25822	615
Benzene	43 to 552	1.0259	0.26666	562.05
Benzoic acid	252 to 892	0.71587	0.24812	752
Bromobenzene	24 to 717	0.8226	0.26627	670.15



# Dodatkowe funkcje po założeniu własnego konta

Aby w pełni skorzystać z bazy Access Engineering i wykorzystać wszystkie jej funkcje....

**ZAREJESTRUJ SIĘ**

**...stwórz swoje osobiste konto**

**ACCESS Engineering**  
Authoritative content. Immediate solutions.

Search Access Engineering **GO**  
[Advanced Search](#)

**HOME** **SUBJECTS** **INDUSTRIES** **TITLES (A-Z)** **CURRICULUM MAPS** **SIGN OUT**

**What's New on AccessEngineering?**

Winner of the 2017 PROSE award for best eProduct physical sciences & mathematics

**DataVis**  
Material Properties  
by ACCESS Engineering

**McGraw Hill Education**

[Register](#) to create your user account, or sign-in if you have an existing account.

[Forgot password](#)

Email

Password

**Submit**

**Featured Content**



# Dodatkowe funkcje po założeniu własnego konta

Będąc zalogowanym, możemy dodawać do tekstu własne:

- komentarze
- cytaty
- adnotacje
- zakładki

The screenshot displays the ACCESS Engineering website interface. At the top, it says "Your access provided by McGraw-Hill Education (organization)". The main header includes the ACCESS Engineering logo and the tagline "Authoritative content. Immediate solutions." A search bar is present with the text "Search Access Engineering" and a "GO" button, along with a link to "Advanced Search".

The navigation menu includes: HOME, SUBJECTS, INDUSTRIES, TITLES (A-Z), and CURRICULUM MAPS. On the right side of the navigation bar, there are links for "MY ACCOUNT" and "SIGN OUT" with a lock icon, and the user's email address "krzysztof.rudzinski@abe.pl" is displayed below.

The main content area is divided into several sections:

- Welcome Krzysztof.Rudzinski**: A personalized welcome message.
- Your recent ACCESS Engineering account activity:** A list of recent activities with links and counts:
  - ▶ Starred items (0)
  - ▶ Annotations & Pins (1)
  - ▶ Manage labels (2)
  - ▶ Saved searches (0)
  - ▶ Search history (6)
- Explore Material Properties with DataVis**: A section promoting DataVis with a link to "My DataVis Projects".

On the right side, there is a "Featured Content" section with a red arrow pointing to it. It features two book covers: "DataVis Material Properties" (Interactive Teaching Tool) and "PERRY'S CHEMICAL ENGINEERS' HANDBOOK 8TH EDITION". Below that is another book cover: "MARKS' STANDARD HANDBOOK FOR MECHANICAL ENGINEERS 100TH ANNIVERSARY EDITION".

At the bottom, there are two sections: "Browse Subjects" and "Tools & Media", each with a row of small image thumbnails.



# Dodatkowe funkcje po założeniu własnego konta

Będąc zalogowanym, możemy dodawać do tekstu własne:

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The main content area shows a book titled "MECHANICAL PROPERTIES OF MATERIALS" with a cover image of "MARKS' STANDARD HANDBOOK FOR MECHANICAL ENGINEERS, 12th Edition". A red box highlights the "Annotations ON" button and a dropdown menu that appears with the text "Make notes on this page". The menu lists two steps: "1. Select some text" and "2. Click the icon". A red arrow points from the text "Make notes on this page" to the "Annotations ON" button.

The page content includes a "Page Contents" section with links to "STRESS-STRAIN DIAGRAMS", "FRACTURE AT LOW STRESSES", "FATIGUE", "CREEP", "HARDNESS", and "TESTING OF MATERIALS". The main text discusses "3.1.1. STRESS-STRAIN DIAGRAMS" and "The Stress-Strain Curve".

# Dodatkowe funkcje po założeniu własnego konta

Wszystkie własne  
zaznaczenia  
są dostępne dla  
użytkownika z poziomu  
Konta Użytkownika.  
W prosty sposób czytelnik  
może wejść do już  
zaznaczonego rozdziału

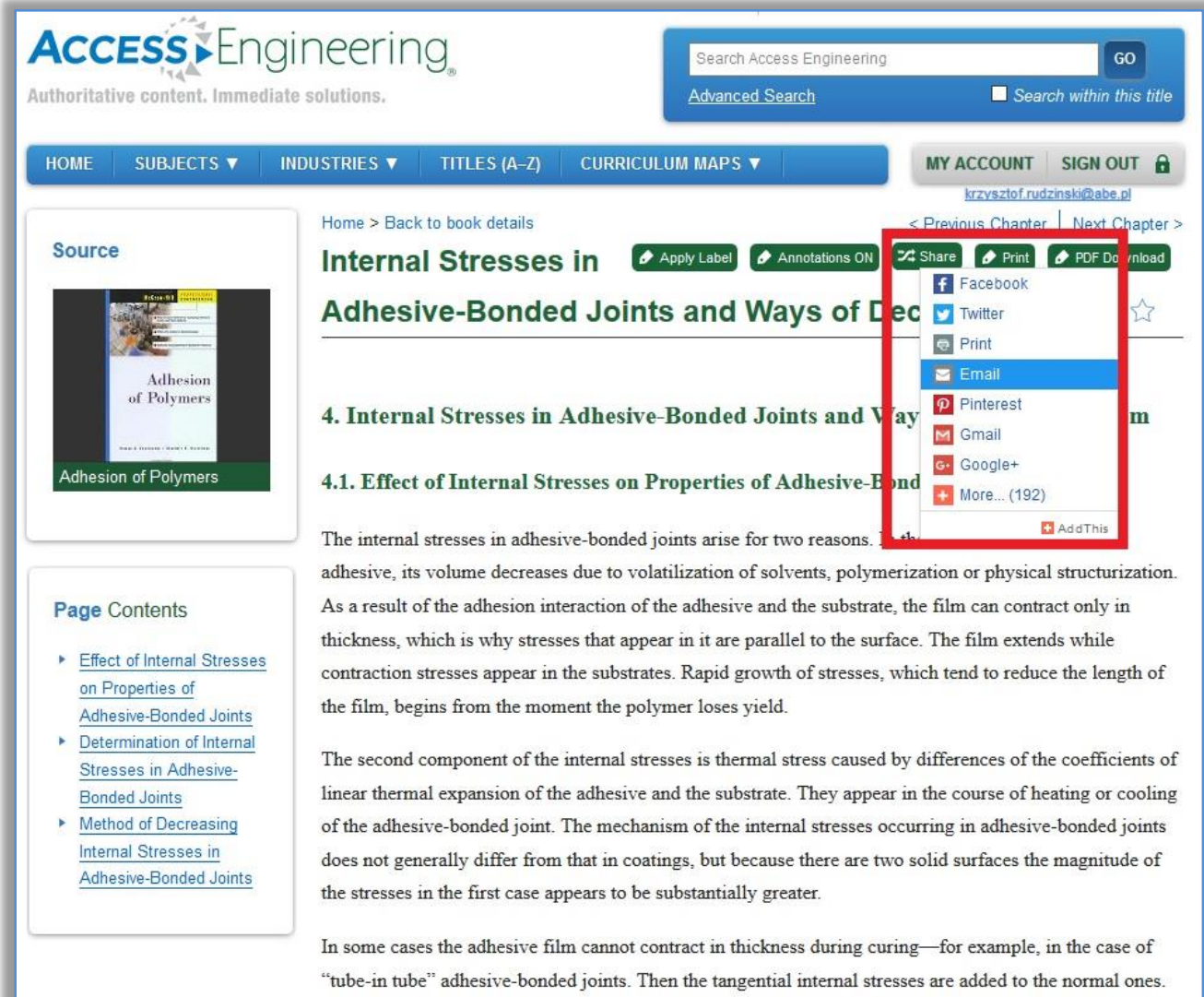


The screenshot displays the ACCESS Engineering website interface. At the top, there are navigation links: ABOUT | HELP | ADMINISTRATION | CONTACT US | ROAMING PASSPORT, along with social media icons and a notification count of 0. The main header features the ACCESS Engineering logo and the tagline "Authoritative content. Immediate solutions." A search bar is present with the text "Search Access Engineering" and a "GO" button, with a link to "Advanced Search" below it. A blue navigation bar contains links for HOME, SUBJECTS, INDUSTRIES, TITLES (A-Z), and CURRICULUM MAPS. On the right of this bar are "MY ACCOUNT" and "SIGN OUT" buttons. The main content area is titled "Annotations & Pins" and includes a breadcrumb trail: Home > My Account > Annotations & Pins. A "My Account" sidebar menu is highlighted with a red box, listing: Starred items (2), Annotations & Pins (3), Manage labels (1), Saved searches (1), and Search history (6). The main content area shows two tabs: "Text (2)" and "Pins (1)". A "Download" button is visible. The first entry is "[Marks' Standard Handbook for Mechanical Engineers, Eleventh Edition] VIBRATION" with the text "Equation of Motion The dynamic behavior of many engineering systems can be approximated with good accuracy by the mass-damp" and a "delete" button. The second entry is "Read this section for Thursday" with "[Marks' Standard Handbook for Mechanical Engineers, Eleventh Edition] VIBRATION" and the text "Discrete System" and a "delete" button. The footer contains three columns: "All Content" (with a link to "All Text"), "Categories" (with links to "Bio" and "Industrial"), and "Useful Links" (with a link to "About").



# Wysyłanie linku do rozdziału do określonych użytkowników.

Możliwość współdzielenia artykułów, komentarzy, cytatów, adnotacji z innymi użytkownikami.



The screenshot displays the ACCESS Engineering website interface. At the top, there is a search bar with the text "Search Access Engineering" and a "GO" button. Below the search bar, the text "Advanced Search" and "Search within this title" are visible. The navigation menu includes "HOME", "SUBJECTS", "INDUSTRIES", "TITLES (A-Z)", and "CURRICULUM MAPS". On the right side, there are links for "MY ACCOUNT" and "SIGN OUT".

The main content area shows the book title "Adhesion of Polymers" and the chapter title "4. Internal Stresses in Adhesive-Bonded Joints and Ways of Dec...". A social sharing menu is open, showing options for Facebook, Twitter, Print, Email, Pinterest, Gmail, Google+, and More... (192). The "Email" option is highlighted.

The "Page Contents" section lists the following items:

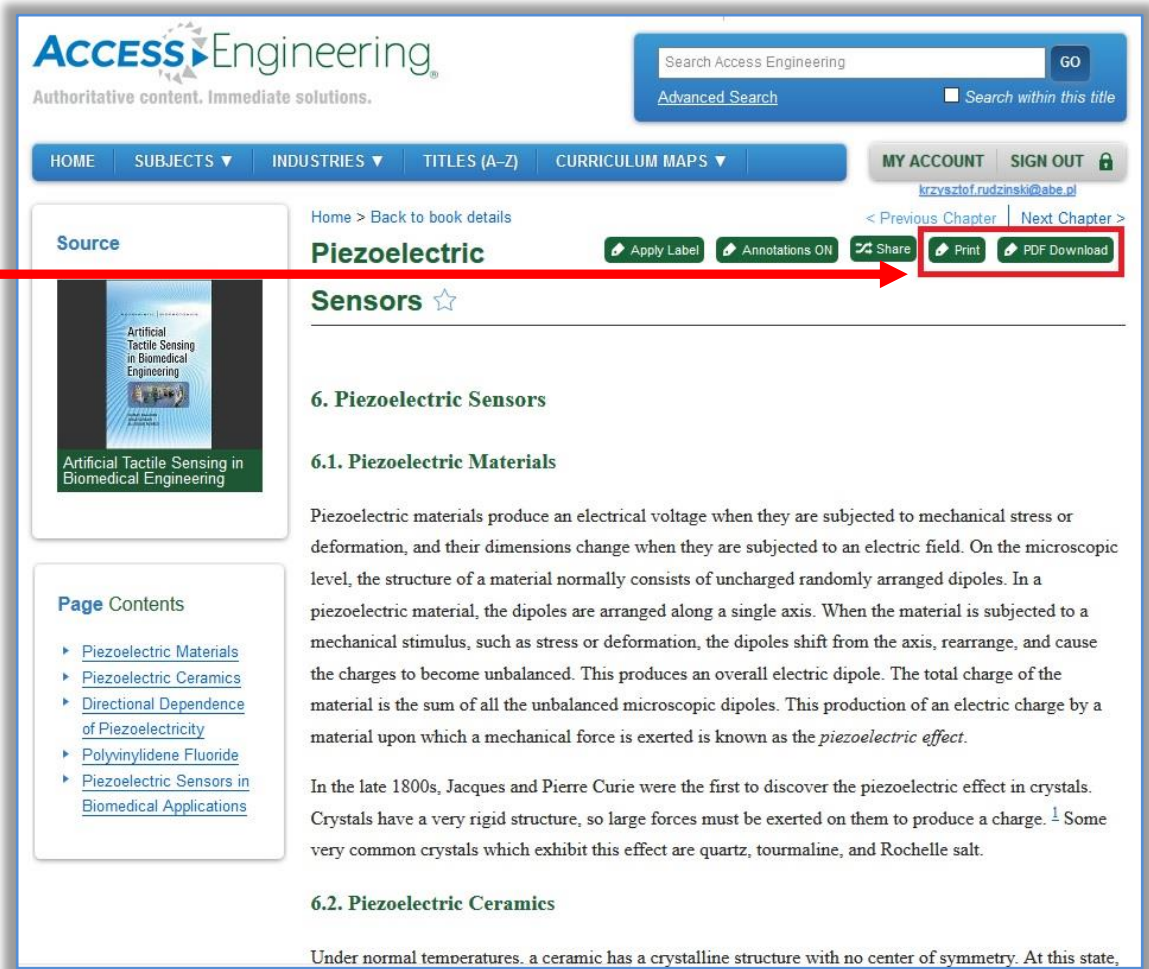
- ▶ [Effect of Internal Stresses on Properties of Adhesive-Bonded Joints](#)
- ▶ [Determination of Internal Stresses in Adhesive-Bonded Joints](#)
- ▶ [Method of Decreasing Internal Stresses in Adhesive-Bonded Joints](#)

The main text of the chapter discusses internal stresses in adhesive-bonded joints, mentioning factors like solvent volatilization, polymerization, and thermal stress.



# Dodatkowe funkcjonalności łatwo dostępne

Możliwość drukowania i  
exportu materiałów  
do pliku PDF



The screenshot displays the ACCESS Engineering website interface. At the top, there is a search bar with the text "Search Access Engineering" and a "GO" button. Below the search bar, there are navigation tabs for "HOME", "SUBJECTS", "INDUSTRIES", "TITLES (A-Z)", and "CURRICULUM MAPS". On the right side, there are links for "MY ACCOUNT" and "SIGN OUT".

The main content area shows the book details for "Piezoelectric Sensors". The title "Piezoelectric Sensors" is prominently displayed. Below the title, there are several interactive buttons: "Apply Label", "Annotations ON", "Share", "Print", and "PDF Download". A red box highlights the "Print" and "PDF Download" buttons, and a red arrow points from the text box on the left to this box.

The page content includes a "Source" section with a book cover image titled "Artificial Tactile Sensing in Biomedical Engineering". Below this, there is a "Page Contents" section with a list of links: "Piezoelectric Materials", "Piezoelectric Ceramics", "Directional Dependence of Piezoelectricity", "Polyvinylidene Fluoride", and "Piezoelectric Sensors in Biomedical Applications".

The main text of the page is titled "6. Piezoelectric Sensors" and "6.1. Piezoelectric Materials". It describes the properties of piezoelectric materials, stating that they produce an electrical voltage when subjected to mechanical stress or deformation. It also mentions the discovery of the piezoelectric effect by Jacques and Pierre Curie in the late 1800s.

At the bottom of the page, there is a section titled "6.2. Piezoelectric Ceramics" which begins with the text: "Under normal temperatures, a ceramic has a crystalline structure with no center of symmetry. At this state,"

# Rozbudowane i szczegółowe statystyki wykorzystania platformy przez użytkowników dostępne poprzez portal SAMS Sigma

## Statystyki:

- ilości wyszukiwania
- wejść
- zapisanych danych

The screenshot shows the 'Reports for Camford University' page. The left sidebar has a 'Reports' menu item highlighted with a red box. Below it, a 'COUNTER 4' report type is selected. A dropdown menu is open, showing options: 'Book Report 1', 'Book Report 2', 'Book Report 3', 'Database Report 1', and 'Journal Report 1'. The 'Book Report 1' option is highlighted with a blue bar. Below the dropdown is a 'Download report' button.

The screenshot shows the 'Dashboard for Camford University' page. The top navigation bar includes 'SAMS Sigma', 'Hello, individual full administering', 'Camford University', and 'Log out'. A search bar is present. A green banner at the top right says 'You are now administering Camford University' with a red arrow pointing to it. The left sidebar has a 'Reports' menu item highlighted with a red box. The main content area features several tiles: 'Organization profile', 'Licenses', 'Agreements', and 'Vouchers'. A 'Reports' tile at the bottom is highlighted with a red box and contains a bar chart icon.



## URZĄDZENIA MOBILNE



ANDROID

- LAPTOPY
- SMARTFONY
- TABLETY





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**Dziękuję za uwagę !**

