Society for Promotion of Excellence in Electronics Discipline

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SPEED e- NEWSLETTER

INSIDE THIS ISSUE:

Future Electronics

Main Article

Future electronics and gadgets will be way beyond iPads, iPods, iPets and the like though the near future will be filled with these gizmos, gadgets and apps. I foresee one day in the not too distant future iPads, iPods, iPhones and all of the associated apps will be combined into one product. This is the **future of electronics.**

How can this be you ask? Size does matter. Indeed it does and there is a way around the size issue. Future electronics technology dictates that one day soon virtual holographic screens and keyboards will appear on the market.

What this means is that you'll be able to have small piece of hardware the size of a USB drive and it will project a virtual holographic screen, keyboard and keypad that is of the size to your liking. From this virtual image you'll be able to type, dial, surf the Internet, watch TV, movies, listen to music, take photos, find yourself and friends locally through GPS, do facial recognition of strangers, run background checks in real time and other items the imagination can't quite grasp right now.

But future electronics will not be all about one product as there will be many open source technological products in the marketplace from which to choose. While walking or hiking would you like to scout out the area ahead? Well, you'll be able to do this with your own personal drone.

Miniature helicopters and airplanes will become so sophisticated and automated you'll be able have them take real time video and do your scouting from miles away. Even while in your car, your vehicle will communicate with these drones about traffic conditions, crowdedness of restaurants, who is at work or school already and too many functions to list.

Decades beyond this your future electronics will be a small device that you'll think into and this will do away with the virtual holographic keyboard, screen and keypad. Think this is farfetched? Humans can already think into computers and do quite complex tasks using current technology. The human brain is made up of billions of neurons running complex electrical processes every nanosecond.

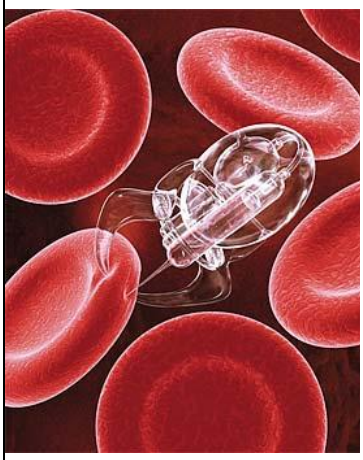
But, let's not get too far ahead of ourselves yet and only go into the foreseeable future of electronics. Within the next decade, Wii and XBox will join forces along with an MIT development of a "Personal Global Playing Area". What this means first is that all Wii-XBox games will be experiential so no matter whether it's Call of Duty or a game of golf, you'll be actively and experientially involved.

The second part of this is that you'll be suspended inside of your personal 360-degree globe where you can run, fall, do summersaults and other stunts in real time without getting injured. This will be 3D, HD interactive play at its finest. This will be quite the opposite of a sensory deprivation chamber and more like a sensory stimulation globe. …… continued on page 2

Future Electronics

"*We love those subjects which we understand and later work on it.*"

-N. M. Kulkarni



FUTURE NANOBOTS

FUTURE MOBILES

In your personal globe you'll also be able to switch to doing work if needed, talk to friends, and take a 3D vacation. No "Total Recall" movie here as you'll have control of stepping into or out of your virtual world at will.

ROBOT HOLOGRAPH IN FUTURE

Future electronics also dictate that with your small electronic device you'll be able to control the every move of your robotic personal assistant. Not only that, but a decade after this robots will go semi-holographic in that you'll be able to project them when and where you want them and have them do tasks that they physically will be able to do in the real world.

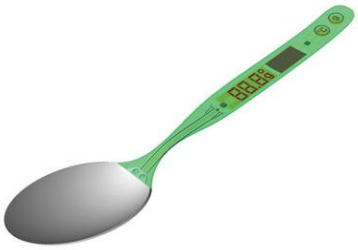
For instance, you'll be able to project your holographic robot from your personal electronic device and have it cook you a meal, prepare your bed, or do what little laundry you'll have at this time. Your hologram robot will have physical properties and will be able to move objects and do other physical tasks. When finished you'll be able to recall your personal robot into your small electronic device and go on with your business.

Future electronics will continue to evolve, mutate and integrate with one's brainwaves and neurological being. Practical and ethical dilemmas will slow progress but only for so long. Electronics integrated into one's body will be inevitable, but then progress past this point will take place and future electronics will no longer be necessary inside or attached to one's body.

As you already know, the future of electronics changes rapidly. Gadgets, gizmos, computer hardware, software, biology, genetics are all quickly changing fields which are moving together at a rapid pace.

In only a few years time, the invention of the laptop will be on par with us looking back at the invention of the printing press or steamboat. Newborns of today will grow up in a vastly more personally power electronic world than we can even imagine today. And they won't even realize the here and now as we know it.

SMART SPOON

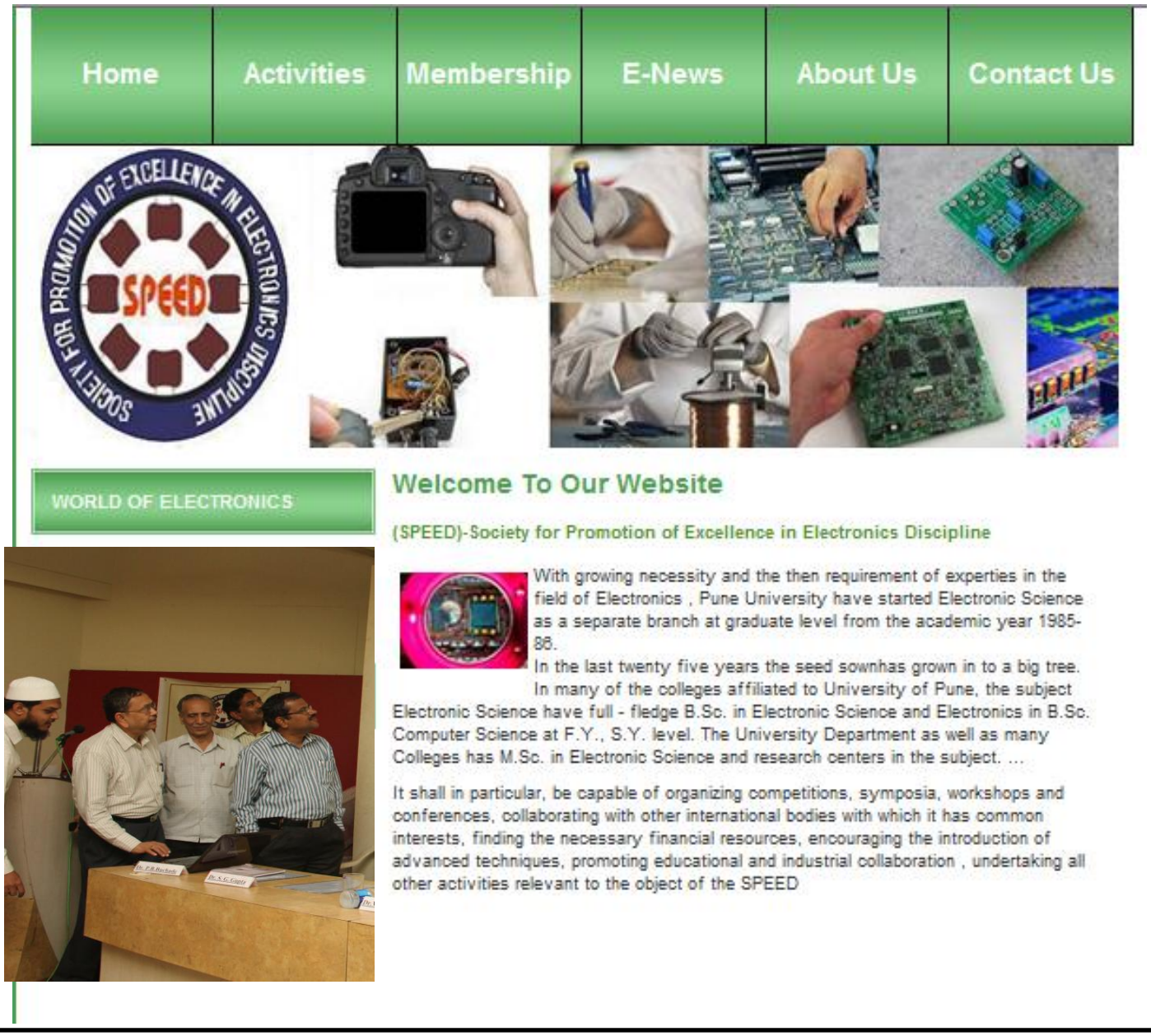


ELECTRONIC PAPER DISPLAY

Courtesy:

-http://www.futuretechnologyportal.com/

Launching of official website of SPEED (www.excellentspeed.org)



SPEED organized the function for launching its official website www.excellentspeed.com on 24th July 2012. The function was arranged in Audio Visual Hall of MES'S Abasaheb Gaware College, Karve Road, Pune 411 004 at 4.00 p.m.

Dr. R. N. Karekar was the Chief Guest for the function. Dr. A. D. Shaligram, Chairman SPEED, Dr. P. B. Buchade Vice Principal and Head Dept of Electronic Science, Abasaheb Garware college, Dr. S. G. Gupta, Principal, Abasaheb Garware College were also present for the function. Students from the Electronics and computer science discipline from different colleges, staff members from different colleges and university and HODs of Electronic Science departments of different colleges and SPEED members were present for the function.

Dr. P. B. Buchade delivered the introductory speech. In this he explained about the different activities of the SPEED and purpose of the function. He also mentioned about the honor to be given to Dr. R. N. Karekar on the occasion. Dr. S. G. Gupta addressed the audience and delivered the welcome speech.

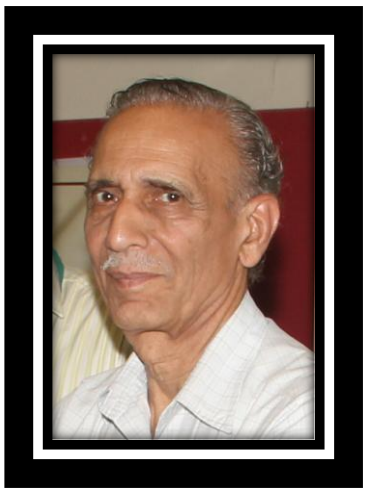
Prof. J. P. Gadre introduced the Chief Guest of the function Dr. R. N. Karekar. Prof. J. V. Khedkar, Head Dept. of Electronic Science, Fergusson College, Pune read the citation for the Chief Guest. Dr. R. N. Karekar was the felicitated by the bouquet, coconut, shawl and the citation. He was also felicitated by honorary membership for the SPEED on the occasion.

After this Dr. R. N. Karekar was requested to launch the official website of SPEED as www.excellentspeed.org . Dr. Karekar spoke about the ways and methods of studying the Physics and Electronics. He also encouraged the students by asking few questions. After the interesting interactions with students and other staff members Dr. A. D. Shaligram talked about the SPEED , its activities like various competitions organized for the undergraduate students of colleges and its future plans and encourages the audience to be part of this activity. SPEED organized various competitions for the year 2011-12. Number of students from the Electronic Science and computer science discipline participated in it. The prize distribution was done on this occasion. Ms. Chugani announced the prizes for the competitions. Winners were felicitated at the hands of Chief Guest Dr. R. N. Karekar, Dr. A. D. Shaligram and Dr. P. B. Buchade.

Dr. M. L. Dongare delivered the vote of thanks for the function. Mrs. Supriya S. Patil was the presenter and coordinator for the function.

-- Mrs. Supriya S. Patil

CITATION



Ravindra Narahar Karekar, you were born on 16th April 1932 and brought up in Kolhapur Maharashtra, India by your able parents. You are popularly known as Karekar Sir or RNK. You graduated from Kolhapur, obtained M.Sc. in Physics from Sagar University and Ph.D in Physics from University of Pune. You were honored to join faculty of Department of Physics, University of Pune and dedicated yourself for teaching and research throughout your career. You always created a caring and active learning environment, where students have opportunities to question, to be inspired and to gain and improve their skills. Your thorough understanding of basics and unconventional thinking make your lectures enjoyable learning process. The concept of "Projects" in B.Sc and M.Sc curriculum introduced first in the Department of Physics to initiate research abilities amongst the students was always pleaded by you. For the benefit of students you developed the document explaining how to write and what to write in the project report. The same is still being followed.

Karekar Sir you have been working in varied research fields such as low frequency communication to study atmospheric science, microwave microstripline circuits, solid state batteries, thin films, sensors etc. During this tenure you have shown the ability to keep pace with the fastest growing subject like Electronics with your inquisitiveness and passion for knowledge. Sir you played a key role in the establishment of "Sensors" activity in Pune University and have been a backbone of the series of Seminars named NSPTS. You "formally" retired as a Professor and Head of the Department of Physics, on 30th April 1992. Even after retirement, for more than 20 years now the university campus has experienced your pleasant presence in the class rooms and research labs. Your love for plantation and nourishment of various trees on the university campus is also noteworthy.

Every discussion with you Sir is a brain storming experience. A very large number of students have undergone training under your able guidance. Your thinking is rational and your teaching is "enthusiastic," "engaging," and "thought-provoking". Sir, you make yourself available and accessible to anyone who seeks some time from you. You are pursued by many, and you motivate them to reach an unimaginable height. In this world of advertisement and rat race of taking credit you always have been silent worker. You have promoted an environment of selfless cooperation in research and the inclusion of young scientists into the field. Exceptional dedication, hard work and long perseverance are your qualities. You have always inspired weaker section of the students to rise up and improve significantly. You are a man of action, yet your action is always grounded in perceptive analysis and thoughtful reflection.

It is not surprising that you have remained a true student who has evergreen curiosity and never hesitate to learn from anybody irrespective of any bars. We all look forward to you as a role model and draw inspiration.

Members and office bearers of SPEED

"Let us work towards Excellence in Electronics for the betterment of society"
-N. M. Kulkarni

SPEED Memberships Details

Membership Type	Fees (Rs.)
1. Patron Members	10,000
2. Life Members	2,000
3. Ordinary members	500 (per year)
4. Student	200 (per year)

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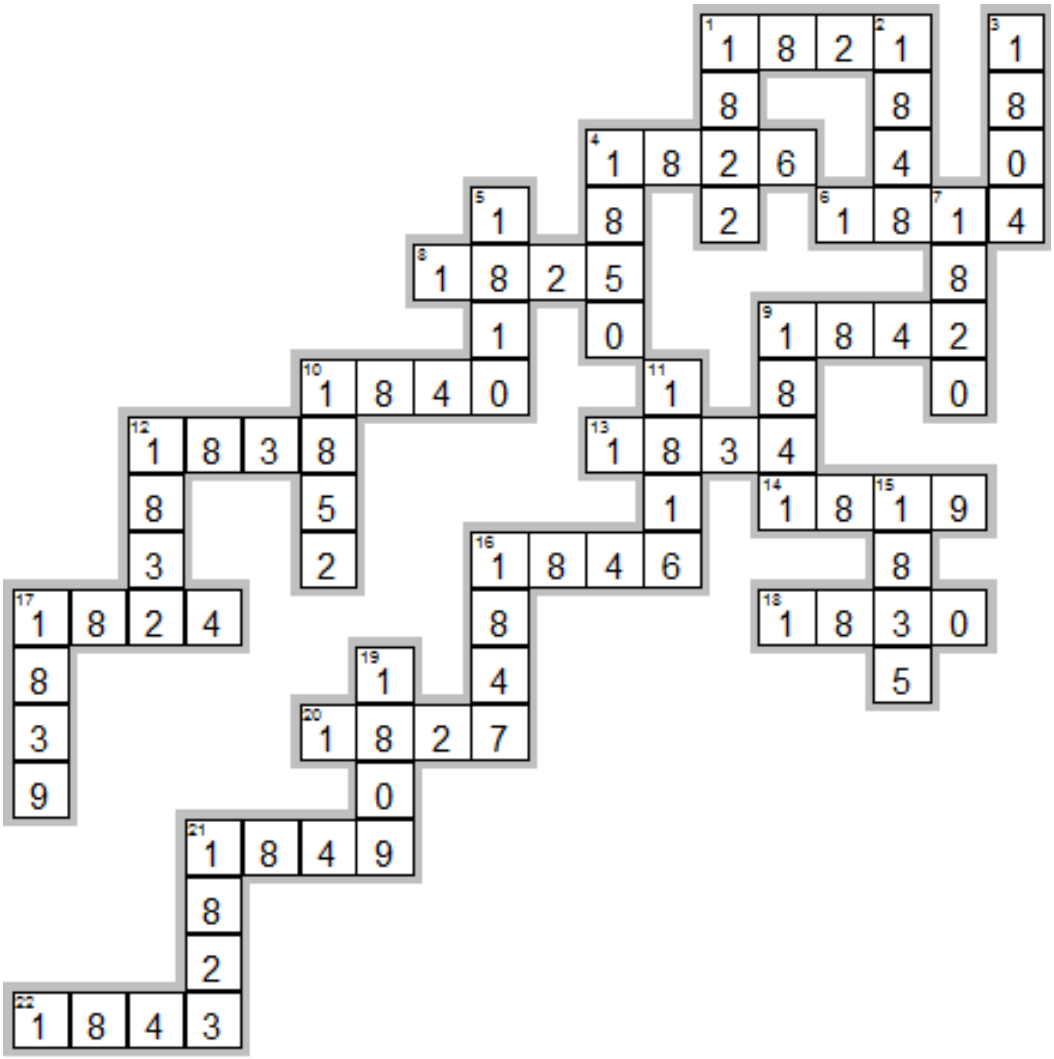
Get connected to SPEED.

We will be on the Web shortly

Answers of Cross-Word Puzzle of May 2012

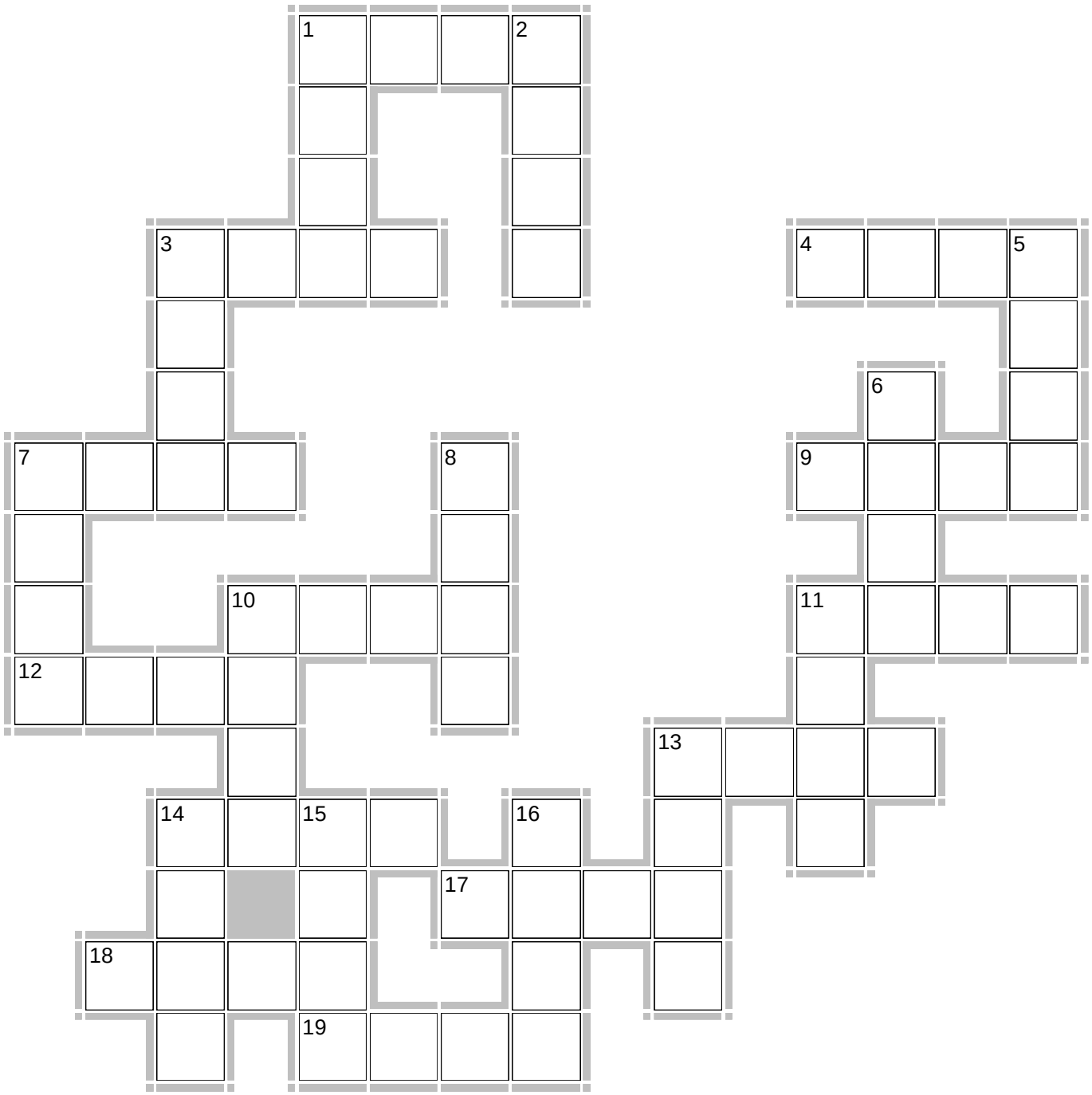
19th Century Inventions_02



Student's corner: CROSS WORD PUZZLE

Crossword on 18th Century Inventions

Hemant Yashwant Satpute



EclipseCrossword.com

Student's corner: CROSS WORD PUZZLE

Across

1. In year ____ Jethro Tull invents the seed drill. (4)
3. In year ____, Steam piston engine was invented by Thomas Newcomen. (4)
4. In year ____, John Harrison, an Englishman, invented the marine Chronometer or Navigational clock. (4)
7. In year _____, E G von Kleist invented the Leyden Jar, which is the first electrical capacitor. (4)
9. In year ____, French C Hopffer patented the Fire Extinguisher. (4)
10. In year ____, Richard Arkwright patented a spinning frame. (4)
11. In year ____, Bartolomeo Cristofori invents the Piano. (4)
12. In year ____, The Spinning Jenny was invented by James Harreaves. (4)
13. In year ____, William Pollard of Philadelphia receives first US patent for his machine that roves and spins cotton. (4)
14. In year ____, Rene Anttoine Ferchault de Reaumur invented the Thermometer. (4)
17. In year ____, a submarine is invented by David Bushnel. (4)
18. In year _____, Alexandro Volta invented the Battery. (4)
19. In year _____, Eli Whitney patented the cotton gin. (4)

Down

1. In year ____, Benjamin Franklin invented yet again Bi-focal Eyeglasses. (4)
2. In year _____, Vaccination was invented by Edward Jenner. (4)
3. In year ____, George Louis Lesage patented the Electric Telegraph. (4)
5. In year _____, William Murdoch invented Gas Lighting. (4)
6. In year ____, Edmond Halley invented the Diving Bell. (4)
7. In year ____, John Shore, an Englishman, invented the Tuning Fork. (4)
8. In year _____, Jean Pierre Blanchard invented a Parachute. (4)
10. In year _____, Edward Jenner created the smallpox vaccine. (4)
11. In year _____, Francois Appert invented food preserving Jar. (4)
13. In year ____, James Watt developed the Steam Engine. (4)
14. In year ____, Alexander Cummings invented a Flush Toilet. (4)
15. In year ____, a steamboat was invented by John Fitch. (4)
16. In year ____, Gabriel C Fahrenheit invented the first Mercury Thermometer. (4)