Vince Aurilio, Executive Director

Ontario Hot Mix Producers Association

Spring Operations Seminar

April 20, 2016

WoA Stats

- Almost 9000 attendees
- 18 % more than 2015; about 38 % more than 2013
- Largest exhibit floor – 157,000 sq. ft.
- More exhibitors than past years
- Excellent technical program
- ~ 15-20 OHMPA Members

Lots of Equipment Featured

OHMPA Members

From an exhibitors perspective, this was the best ever WOA…

Plants


GENCOR
CDE
Hy-Way
GENCOR
INDUSTRIES INC.


HOT MIX
HEATEC
HEATEC

Pavers


AP1055F
CAT


CARLSON


BOMAG
WIN
$100
SAFETY VEST


SMART
WORKS.
2100
VOLVO
P7110B

Material Transfer

Rollers

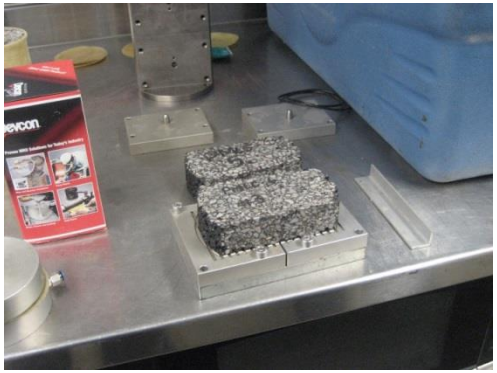

BOMAG

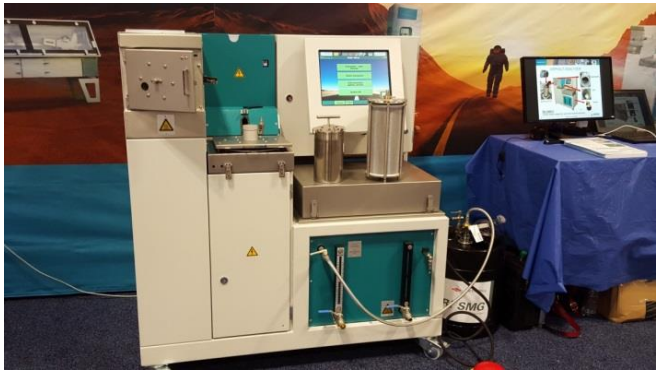

HAMM
HAMM
VÖGELE


SAKAI
SAKAI
4000 VPM
SuperHF
SAKAI


CAT
CAT

Some Different Stuff





Old Friends

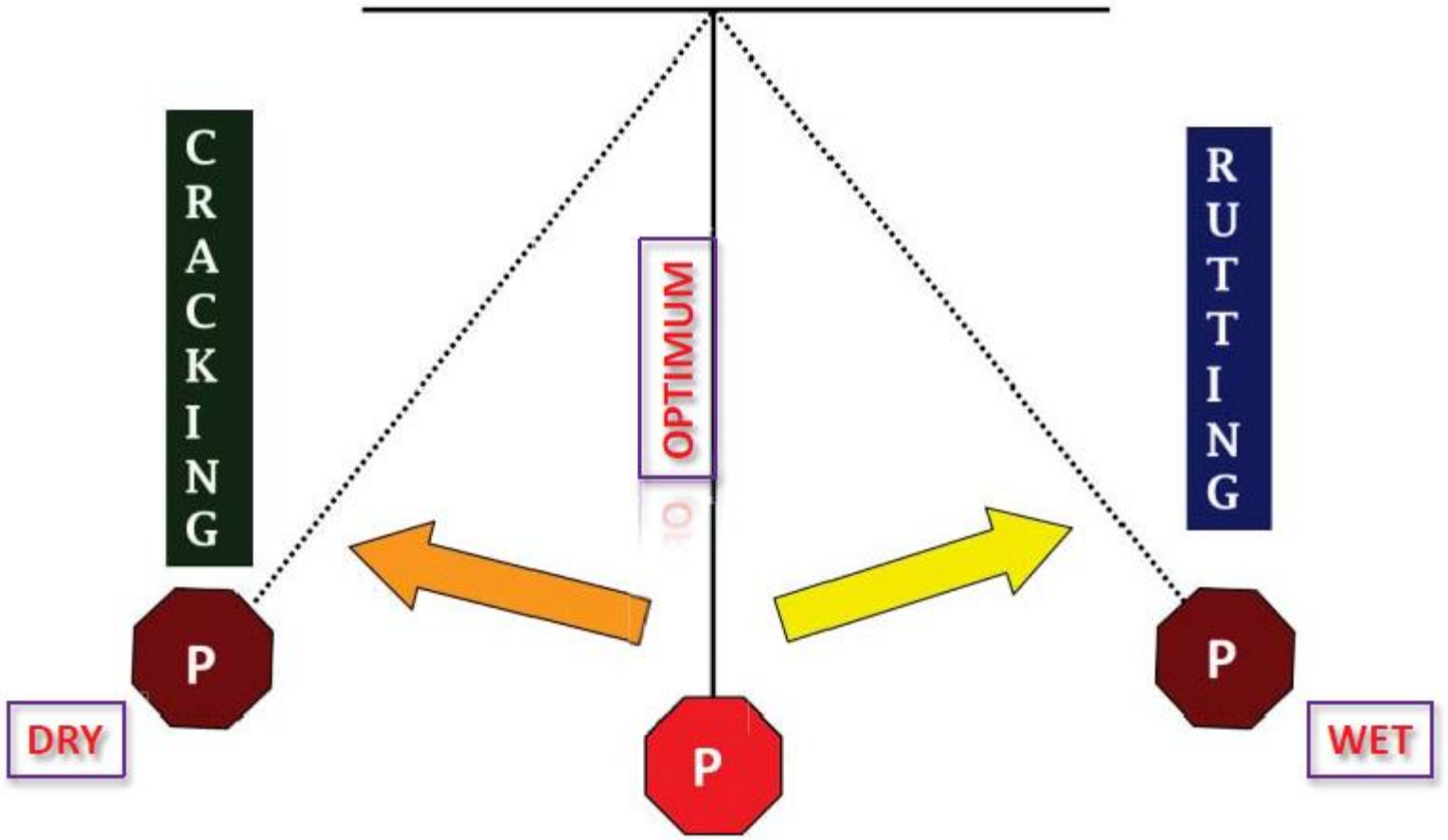

asphalt institute
Global, International, Regular, Associate and
ZAHORI
IRVING
McCall
NYNAS
Shell Bitumen
Suit-Kote
VALERO
YPF
Affiliate and Commercial members
Cargill
institute

Technical Program

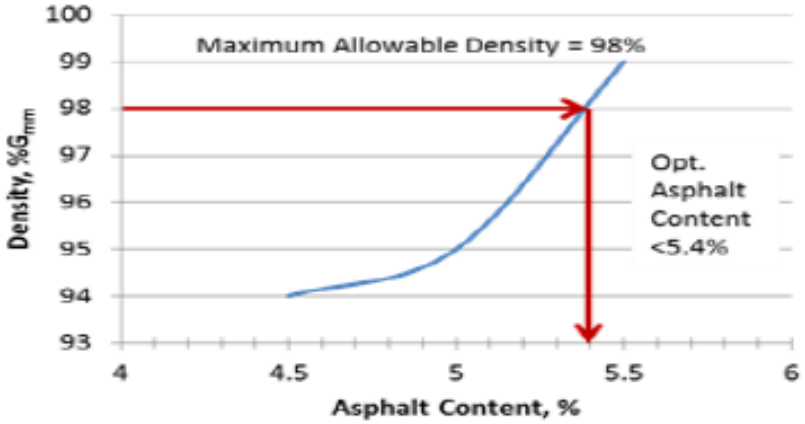
Excellent Sessions!

1. Mix Design – Changing the Recipe Book, D. Newcomb
2. Effective Community Outreach & Communication, B. Beyke
3. Trouble-Shooting AC Content Problems (Part 2), TJ Young
4. HMA Plant Maintenance & Energy Efficiency, D. Garrett

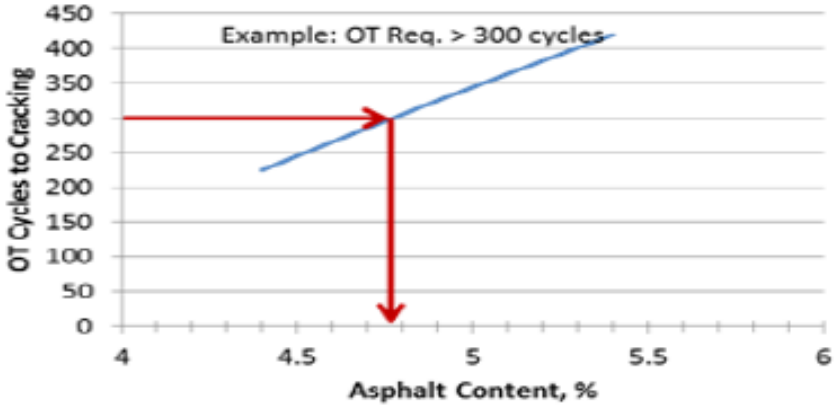
New Challenges?



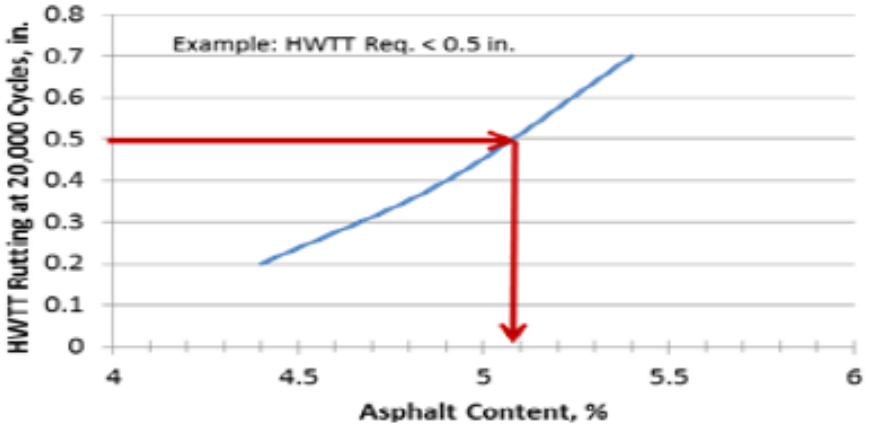
Balanced Mix Design



a. Volumetric Analysis to Set Max. Asphalt Content



b. Overlay Tester Results



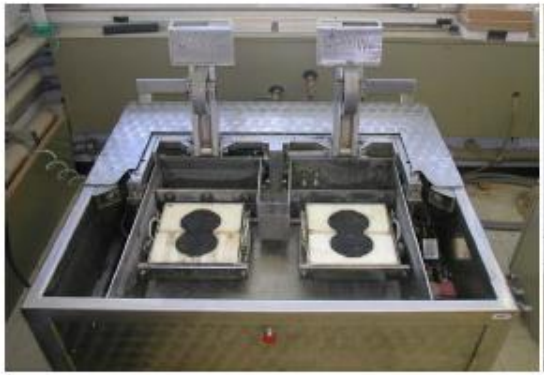
c. HWTT Results

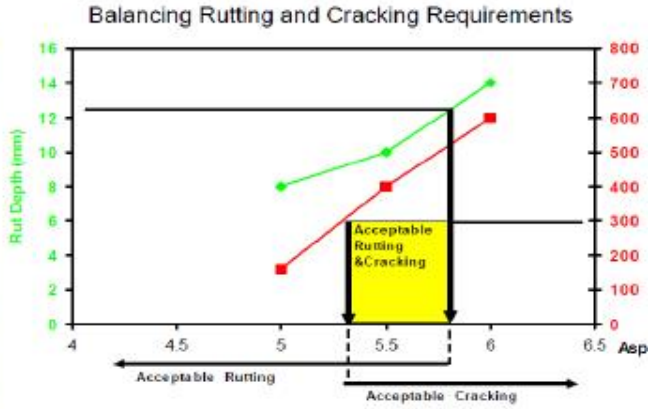
- Maximum Asphalt Content = 5.4%
- Opt. Asphalt Content (OAC)= Lowest Asphalt Content for Cracking Resistance or Highest Asphalt Content for Rutting Resistance
- OAC = 5.1%

d. Summary of Results

Balanced RAP/RAS Mix Design

- Hamburg test for rutting/moisture damage
- Overlay test for cracking
  OT requirement determined by Overlay program
- Max. density-98% for controlling potential bleeding






2002
2009
FIX OUR
POTHOLES
NOW!
NO
ASPHALT
NO!
HTTP://STEVE-RUSTAD.PETALUMA360.COM

Common Complaints

- ✓ Noise
- ✓ Odor
- ✓ Visible air emissions
- ✓ Traffic
- ✓ Dust
- ✓ Is it toxic?


PD29-4
Historylink101.com

What Should You Do?

- State position clearly, succinctly, without overwhelming technical information.
- Offer facility tour, if appropriate.
- Document that you are a good, corporate citizen in community.
- Get them to contact you instead of calling regulatory agency.

Conclusion

- Environmental activist groups are gaining ground across the country.
- Better to be proactive.
- Establish and implement company program.
- Build community relations and trust.
- Stay cool, listen, respond appropriately.

Trouble-Shooting Problems

Trouble-Shooting Asphalt Content Problems in Drum-Mix Plants

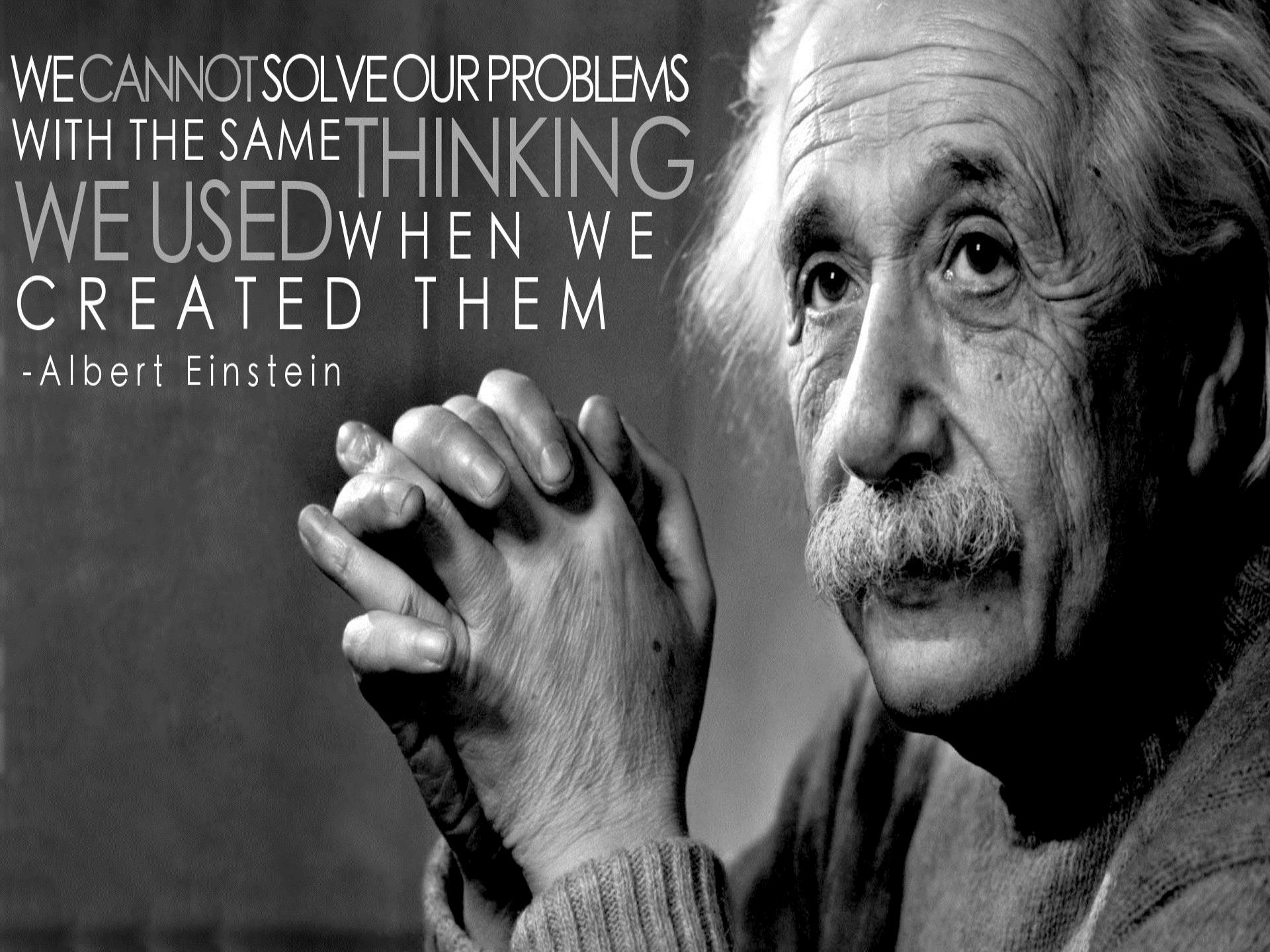
AC Content High	Belt scale is reading artificially high due to calibration problem, rock in pivot point, accumulated fines on belt, wind effect on belt, or drastic ambient temperature variations. Asphalt meter reading artificially low, due to incorrect specific gravity of the asphalt cement, incorrect calibration factor with the liquid asphalt cement being run, temperature swings to the liquid asphalt cement that impact metering accuracy. AC% in reclaimed materials higher than entered. Incorrect moisture setting in automation (to low). Ignition oven used for testing & moisture in mix. Mix segregation – also check extracted gradations.
AC Content Low	Belt scale is reading artificially low due to calibration problem, rock in pivot point, wind effect on belt, or drastic ambient temperature changes. Asphalt meter reading artificially high, due to incorrect specific gravity of the asphalt cement, incorrect calibration factor with the liquid asphalt cement being run, temperature swings to the liquid asphalt cement that impact metering accuracy. AC% in reclaimed materials lower than entered. Incorrect moisture setting in automation (too high). Mix segregation – also check extracted gradations.
AC Content Varies	Unstable asphalt flow control device – automation cannot control. Erratic belt scale signals causing AC flow to vary. Temperature fluctuations in metered asphalt cement with ACs that are temperature sensitive. Ambient temperature fluctuations affecting belt scale accuracy. Fluctuations in AC content in reclaimed materials. Changing material moistures not being entered. Ignition oven testing & moisture sometimes in mix. Mix segregation – also check extracted gradations.

Drum-Mix Plants (gradations larger than the -200 mesh / 75 micron "dust sieve")

Extracted Gradation	Combined Gradation	Individual Gradations	Investigate
Incorrect	Incorrect	Incorrect	Gradation change in individual material Segregation of stockpiled material
Incorrect	Incorrect	Correct	Feed bin out of calibration Plugged feed bin Wrong mix recipe
Incorrect	Correct	Correct	Mix segregation

Drum-Mix Plants (for percent passing the -200 mesh / 75 micron "dust sieve")

Extracted Gradation	Combined Gradation	Individual Gradations	Investigate
Incorrect	Incorrect	Incorrect	Gradation change in individual material Segregation of stockpiled material
Incorrect	Incorrect	Correct	Feed bin out of calibration Plugged feed bin Wrong mix recipe
Incorrect	Correct	Correct	Production rate changes if 100% baghouse dust return Draft level at time if dust wasted, partial return, or silo return Return equip out of calibration if partial return or silo return Inclined dust screw with start & stop Mix segregation


WE CANNOT SOLVE OUR PROBLEMS
WITH THE SAME THINKING
WE USED WHEN WE
CREATED THEM
-Albert Einstein